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In this issue

Investment of Idle School Funds
FORREST HARRISON

How Fare American Youth in 1962?
J. DAN HULL and HOWARD H. CUMMINGS

JANUARY–FEBRUARY 1962

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A liberal education

That man, I think, has had a liberal education who has been so trained in youth that his body is the ready servant of his will, and does with ease and pleasure all the work that, as a mechanism, it is capable of; whose intellect is a clear, cold, logic engine, with all its parts of equal strength and in smooth working order; ready, like a steam engine, to be turned to any kind of work and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of Nature and of the laws of her operations; one who, no stunted ascetic, is full of life and fire; but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience; who has learned to love all beauty, whether of Nature or of art, to hate all vileness, and to respect others as himself.

Such an one and no other, I conceive, has had a liberal education; for he is, as completely as a man can be, in harmony with Nature. He will make the best of her, and she of him. They will get on together rarely; she as his ever beneficent mother; he as her mouthpiece, her conscious self, her minister and interpreter.

THOMAS HENRY HUXLEY

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE • ABRAHAM RIBICOFF, *Secretary*
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Brief. . . . . EDUCATION AND GOVERNMENT Reports . . . . . .

NSF summer institutes

This summer about 20,500 high school teachers and 2,000 college teachers will increase their knowledge of the subjects they teach through the National Science Foundation's institute program. NSF has made $26.4 million available to 274 colleges and universities to support 475 summer institutes for science and mathematics teachers.

The institutes will offer special courses designed to renew the teacher's knowledge of fundamentals, acquaint him with recent developments, and familiarize him with new ways of presenting subject matter in science, mathematics, and engineering.

A typical institute will have 50 students, last 6 to 8 weeks, and offer intensive courses with lectures, demonstrations, discussion sessions, laboratory work, and homework.

There will be 118 institutes in mathematics, 53 in biology, 39 in chemistry, and 23 in physics. Nearly 165 institutes will offer courses in multiple fields. Other institutes will be in the earth sciences, oceanography, regional science, statistical psychology, anthropology, and the history and philosophy of science.

NSF grants cover tuition and fees, stipends of not more than $75 a week, allowances for travel, and allotments for dependents up to four.

Sponsoring institutions will select candidates and application should be made to them. For a list of institutions, write to the National Science Foundation, 1951 Constitution Avenue, NW., Washington 25, D.C., and ask for press release NSF–61–165.

Physical fitness

The President's Council on Youth Fitness has issued a report, "Youth Physical Fitness: Suggested Elements of a School-Centered Program, Parts One and Two," and has sent 250,000 copies to school administrators and school boards. The report contains recommendations for improving school health programs, suggests administrative policies and practices for putting youth fitness programs into effect, offers suggestions for teachers and leaders on exercises, games, and other activities, and includes sketches of activities it recommends. Extra copies are available from the Government Printing Office for 40 cents each (No. Pr 35:8:Y 8/P 56/pt 1, 2).

The President's Council on Youth Fitness was established by President Eisenhower in 1956 after a research project showed that 58 percent of American children failed a basic physical fitness test that only 9 percent of European children failed.

Members of the Council include the Attorney General, the Administrator of Housing and Home Finance, and the Secretaries of Interior, Labor, Commerce, Agriculture, Defense, and Health, Education, and Welfare (who is chairman). President Kennedy has appointed Charles B. (Bud) Wilkinson, once football coach at the University of Oklahoma, as head of the Council.

The U.S. Army Dependents' Schools in seven countries and Okinawa are conducting pilot projects for the Council, as are schools in Muskogee and Midwest City, Okla., Belcourt, N. Dak., Savannah, Ga., Springfield, Mo., and 38 districts in Pennsylvania (under the direction of Pennsylvania State University).

Already the pilot projects have tested 200,000 children for physical fitness (the test measures strength, flexibility, and agility) and have found that nearly half of them could not pass it. The pilot city of Muskogee, however, found that about a quarter of the children who could not pass the test when it was first given, passed it 6 weeks later through a program suggested by the Council. Now everyone in Muskogee is excited about the pilot project and the school system's 10,000 students are taking part—at an estimated cost of only $1 for each student.

Our growing population

Census-taking by the U.S. Government dates back to the first days of the republic. The wise leaders who wrote the Constitution provided for the taking of a census every 10 years. Beginning in 1790, the United States has counted its population 18 times.

Each of the censuses has shown growth—sometimes in land, always in people. In 1790 less than 4 mil-

lion people were living on 888,811 square miles, all east of the Mississippi; in 1960 over 179 million people were living on 3,615,206 square miles from the Atlantic to the Pacific and beyond (this figure does not include Puerto Rico or other outlying parts). If predictions are accurate, we will be a Nation of 215 million people by the next census.

This information is from a 12-page pamphlet "Our Population Growth" prepared by the Bureau of the Census from the results of the 1960 Censuses of Population and Housing. It costs 5 cents a copy ($5 for 100) and may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

Housing management courses

A group of housing experts and gerontologists is developing a training program for colleges to use as courses and special seminars on the administration of housing for older persons. The Special Staff on Aging of the Department of Health, Education, and Welfare is sponsoring the program.

The group hopes to have a training program worked out by late spring and that several universities will offer courses next fall. Preliminary plans call for setting up a 2-year post-graduate course and 8-week short courses. The postgraduate course would be for persons planning to manage housing centers for older persons, and would emphasize financing, administration, personnel and human relations, health and medical care of the aged, and the principles of gerontology. The short course for managers of centers is now in operation.

Donald P. Kent, director of the Special Staff on Aging, points out that there has been a tremendous growth in recent years in the number of housing projects and homes for older persons and that centers are running short of trained operators.

Information on West Point

The U.S. Military Academy, at West Point, accepts about 800 young men each year as cadets for training as officers in the U.S. Army.

The Admissions Division of the Academy has distributed a booklet, "The United States Military Academy, West Point, New York," and a leaflet, "Class of 1965," to secondary schools across the United States. These publications describe the qualifications a candidate must have, how cadets are appointed, the military training and academic instruction they receive, and what a career in the Army is like; used with the *USMA Catalogue*, they are helpful to principals, counselors, and teachers.

The Admissions Division has also prepared films on the Academy and will lend them through Army film and equipment exchanges. One of these, "The Making of a West Pointer," follows the life of a cadet from entry to graduation.

Inquiries about West Point should be addressed to The Admissions Division, United States Military Academy, West Point, N.Y.

Teachers for the deaf

In a few years more deaf children in the United States (the Office of Education estimates the United States has between 35,000 and 38,000 deaf school-age children at present) than ever before will have an opportunity for education designed especially for them because of a program authorized by Public Law 87–276 (Sept. 22, 1961). In 3 years, through the program, 500 teachers will receive special training in teaching the deaf: 260 by September 1963 and 240 more by September 1964. Training will be conducted in accredited public and nonprofit institutions of higher education. Congress has authorized an appropriation of $3 million for the program. Funds will be used for scholarships and for the costs of the special courses.

The Commissioner of Education, who is administering the program, has appointed a 12-man Advisory Committee on the Training of Teachers of the Deaf, in accordance with P.L. 87–276. Members represent institutions with programs for training teachers of the deaf or persons either responsible for the teaching of deaf children or interested in the work. They are—

Clarence D. O'Connor, superintendent, Lexington School for the Deaf, New York City.

George Pratt, principal, Clarke School for the Deaf, Northampton (Mass.).

George Detmold, dean, Gallaudet College.

S. Richard Silverman, director, Central Institute for the Deaf, St. Louis.

June Beverly Miller, professor of hearing and speech, University of Kansas.

Alice Streng, professor of exceptional education, University of Wisconsin (Madison).

William McClure, superintendent, Indiana School for the Deaf.

Richard G. Brill, superintendent, California School for the Deaf.

Donald Marvin Garretson, principal, Montana School for the Deaf.

Patria Winalski, consultant, U.S. Office of Education.

T. A. Prewitt, Tillar, Ark., former member of the board of trustees, Arkansas School for the Deaf.

Morris R. Cunningham, Washington, D. C., newspaper correspondent.

The Committee held its first meeting in Washington on January 3–5 to help the Office of Education work out details of the new program. In the future the committee will review applications for grants and scholarships.

The President's Recommendations for Education

Excerpt from the address on the state of the Union, January 11, 1962

EQUALLY important to our strength is the quality of our education. Eight million adult Americans are classified as functionally illiterate. This is a disturbing figure reflected in selective service rejection rates, welfare rolls, and crime rates. And I shall recommend plans for a massive attack to end this adult illiteracy.

I shall also recommend bills to improve educational quality, to stimulate the arts, and, at the college level, to provide Federal loans for the construction of academic facilities and federally financed scholarships.

If this Nation is to grow in wisdom and strength, then every able high school graduate should have the opportunity to develop his talents. Yet nearly half lack either the funds or the facilities to attend college. Enrollments are going to double in our colleges in the short space of 10 years. The annual cost per student is skyrocketing to astronomical levels—now averaging $1,650 a year, although almost half of our families earn less than $5,000. They cannot afford such costs—but this Nation cannot afford to maintain its military power and neglect its brainpower.

But excellence in education must begin at the elementary level. I sent to the Congress last year a proposal for Federal aid to public school construction and teachers salaries. I believe that bill, which passed the Senate and received House committee approval, offered the minimum amount required by our needs and—in terms of across-the-board aid—the maximum scope permitted by our Constitution. I therefore see no reason to weaken or withdraw that bill: and I urge its passage at this session. . . .

These are not unrelated measures addressed to specific gaps or grievances in our national life. They are the pattern of our intentions and the foundation of our hopes. . . .

Our program is to open to all the opportunity for steady and productive employment, to remove from all the handicap of arbitrary or irrational exclusion, to offer to all the facilities for education and health and welfare, to make society the servant of the individual and the individual the source of progress, and thus to realize for all the full promise of American life.

Excerpt from the message on the budget for fiscal year 1963, January 18, 1962

EXPENDITURES for existing and proposed education programs are estimated to be $1.5 billion in 1963, an increase of $327 million over 1962. A strong educational system providing ready access for all to high quality free public elementary and secondary schools is indispensable in our democratic society. Moreover, able students should not be denied a higher education because they cannot pay expenses or because their community or State cannot afford to provide good college facilities. This budget therefore includes funds for the legislative recommendations pending before the Congress to provide loans for the construction of college academic facilities and funds for college scholarships, and assistance to public elementary and secondary education through grants for the construction of classrooms and for teachers' salaries. The budget also includes funds for a new program of financial aid to improve the quality of education by such means as teacher training institutes. Continuing our policy of building the research effort of the Nation, funds are recommended for the National Science Foundation to expand support for basic research and the construction of research facilities, particularly at colleges and universities, and to strengthen programs in science education.

Message on education, February 6, 1962

NO TASK before our Nation is more important than expanding and improving the educational opportunities of all our people. The concept that every American deserves the opportunity to attain the highest level of education of which he is capable is not new to this Administration—it is a traditional ideal of democracy. But it is time that we moved toward the fulfillment of this ideal with more vigor and less delay.

For education is both the foundation and the unifying force of our democratic way of life—it is the mainspring of our economic and social progress—it is the highest expression of achievement in our society, ennobling and enriching human life. In short, it is at the same time the most profitable investment society can make and the richest reward it can confer.

Continued on p. 29

Arno Jewett and Doris V. Gunderson

What about speed reading and comprehension?

IS SPEED READING the open sesame to all knowledge? Will a speed-reading course improve a person's reading rate and comprehension of difficult material at the same time? Are all speed-reading courses worth the money and effort? These questions are both provocative and controversial; the answer, which may be "Sometimes," "Not always," or "No!" will depend upon the point of view of the individual.

In any consideration of speed reading, it is well to consider the reader's aims and objectives. Rapid reading can be used to advantage in many situations. The average reader can learn to read both more rapidly and more efficiently. However, an individual does not read more efficiently merely by telling himself to do so; efficient reading depends upon continual practice of the various reading skills. The good reader utilizes context clues, and specific and general meanings of words. He discerns the author's plan as he reads; he *always* reads with a purpose. If his purpose is to discover main ideas, he will read at a more rapid rate than if he is reading for details. He may use the technique of skimming, perhaps to glance at headlines in a newspaper. Simply stated, the effective reader adjusts his rate to the purpose for which he is reading.

There are many individuals who read with excellent comprehension, but who read too slowly. Many professional people, for example, could read more rapidly and more efficiently than they do with no resultant loss in comprehension. For them, a speed reading course can be of benefit.

However, there are many people in the field of education who are aware that too much emphasis on speed reading may have adverse effects. As Clarence Hach, head of the English Department of the Evanston, Ill., Township High School, has pointed out in *Here's Your High School*, October 1961, "There are many charlatans today eager to earn some easy and quick money at the expense of parents interested in having their children improve their reading. Reading involves far more than speed, and often a speed-reading course can do much more harm than good. Parents ought to be sure that work on speed is what a child needs before they spend many dollars on speed-reading courses. Often the need is something else." Parents of students attending Evanston Township High School have been advised to confer with the school's full-time reading consultant before they make arrangements for any kind of out-of-school help in reading for their sons and daughters.[1]

In many other communities, unfortunately, there are still teachers and many lay persons who hold the mistaken belief that there is usually or always a causal relationship between speed of reading and comprehension of the material read. Thus even today there are intensive programs to accelerate pupils' rates of reading conducted with the expectation that their comprehension will automatically improve. Some teachers do not realize that rate of reading depends on many factors related to both the reader and the printed material.

Dr. Jewett, Office specialist for secondary school English, has taught both English and history in secondary schools and English at Arizona State College, San Diego State College, the University of Texas, Columbia University (visiting professor), and the American Army University at Shrivenham, England. In 1949 he conducted a survey of the curriculum in secondary schools in West Germany. In 1960 he served as chairman of the International Conference on Education, held in Luxembourg and sponsored by the Atlantic Treaty Association. He is the author of several Office bulletins and of numerous articles published in professional education journals. He is on the editorial staffs of the Clearing House *and* School Life.

Dr. Gunderson, research assistant for reading, joined the Office of Education in September 1961. She has taught in public schools, the University of Minnesota, North Dakota State University, and other colleges, and has written for professional and educational journals.

[1] *Here's Your High School*, Evanston Township High School, 12:2, Oct. 1961.

Speed of reading depends to a great extent on the reader's purpose as well as his motivation, experience, vocabulary, knowledge, intelligence, physical condition, and other factors. It depends to a large extent on the nature and difficulty of the material read, including the author's style, his vocabulary, organization of ideas, and use of examples, topic sentences, and summary paragraphs. Even the editor's layout is important: his use of illustrations—charts, diagrams, and pictures—and paragraph and chapter headings.

The type, amount, or extent of comprehension demanded of the reader is also important. A pharmacist reading a doctor's prescription must read for 100-percent accuracy, just as a 16-year-old reading a sales contract for a second-hand car should understand everything in fine print. A student reading the sports page or a light novel may read fast, for he seldom needs to comprehend or recall everything, but the quality of literary experience a student should derive from Robert Frost's poem "Birches" with its images and metaphors and recollections of boyish adventure would certainly require a slower, more leisurely reading than an article on "My Favorite Highways in America."

Several research studies seem to support these generalizations. In 1938 Eva Bond found that rapid reading in grade 9 helped pupils enlarge their vocabularies and widen their literary acquaintance but that slow reading was characteristic of high achievement in science, mathematics, and Latin.[2]

After his study of 100 high school freshmen to discover the relation of speed of reading to comprehension, Tinker stated that "the relation between rate of work and power of comprehension is determined in some degree by the level of difficulty of the reading material. . . . In relatively easy reading, this relation is fairly high, but in more difficult material the relation is still significant but only low to moderate in size." Tinker has concluded, as have others, that the type of response required of the reader may influence the relation between rate and power of comprehension.[3]

According to the 1960 *Encyclopedia of Educational Research*, Carlson found that the effectiveness of fast and slow readers is dependent on their level of intelligence, their purpose, the difficulty of materials, and the continuity of context. He found that bright, rapid readers are more efficient than slow ones and that average and slow readers comprehend more when they read slowly.[4] Fast readers are not always good readers, nor are slow readers necessarily poor readers.

Teaching pupils to read faster may or may not improve their comprehension. As Traxler has pointed out, "The comprehension of some bright but overcautious pupils may be improved by training them to read faster, but the same kind of training will work to the detriment of other pupils. Since speed without comprehension is worthless, it is believed that the greater emphasis should always be placed upon comprehension in a reading program. . . ." Traxler also reports that ". . . mature readers adjust their rate according to the difficulty of the material and their familiarity with it, and . . . better readers adjust more readily than the poorer ones do. There is also evidence that in certain fields, such as science and mathematics, the pupils who have learned to read slowly and carefully are higher achievers than the fast readers."[5]

The whole problem of the effect of speed on comprehension is particularly important when one considers the place of mechanical devices in a reading improvement program. In the volume *Research in Reading During Another Five Years*, July 1, 1953–December 31, 1957, published in May 1960, Traxler and Jungeblut devote four pages to the question, "What Does Recent Research Indicate With Regard to the Value of Controlled Reading by Means of Mechanical Devices?" After citing four recent, rather well-designed studies, they wrote: "The general conclusion to be drawn from these four studies is neither favorable nor unfavorable to mechanical aids. As was true of a good deal of earlier research, these studies (college and adult levels) do not indicate that any greater improvement in either speed or comprehension can be obtained through the use of mechanical devices than can be secured with more informal procedures."[6]

There is, however, little doubt that many pupils and adults have developed slow, inefficient habits of reading which can be changed, at least temporarily, by speed exercises of different types. It is possible to increase one's speed by reading relatively easy, interesting materials at a rapid rate and then maintaining a record of one's progress. If the record is graphically portrayed, the

[2] Eva Bond, "Reading and Ninth Grade Achievement," Teachers College, Columbia University, *Contributions to Education*, No. 756, 1938, pp. 56–58.

[3] Miles A. Tinker, "Rate of Work in Reading Performance as Measured in Standardized Tests," *Journal of Educational Psychology*, 36:217–288, April 1945.

[4] Thorsten Carlson, "The Relationship Between Speech and Accuracy of Comprehension," *Journal of Educational Research*, 42: 500–512, 1949.

[5] Arthur E. Traxler, "What Does Research Suggest About Ways to Improve Reading Instruction?" *Improving Reading in the Junior High School*, U.S. Department of Health, Education, and Welfare, Bul. 1957, No. 10, p. 7.

[6] Arthur E. Traxler and Ann Jungeblut, *Research in Reading During Another Five Years*, New York, Educational Records Bureau, 1960, pp. 44–47.

progress is quickly noted and often has a motivating effect. Comprehension should be checked for each exercise. Forcing oneself to read more rapidly should improve concentration, as the reader has no time in which to allow his mind to wander. In turn, improved concentration should result in more effective study habits. To maintain his level of reading efficiency, the reader should continue practice with similar materials at regular intervals. And he should constantly work to enlarge his vocabulary.

But to improve rate of comprehension, a person should learn to be flexible in his reading. He should decide, for example, whether his purpose is to skim a chapter to locate an important date, to follow detailed instructions for assembling a model plane, to enjoy the action and suspense in a novel, or to recall the main ideas and facts in an assigned chapter on science. If he is skimming for a fact, he should speed along at 1,500 to 2,000 words a minute, but if he is figuring out the requirements in a mathematical problem he might well move along at 100 words.

In a discussion of the characteristics of mathematical reading, Clark says, "The learner's reading rate is necessarily slow. There is no such thing as 'skimming.' Every word, phrase, and symbol must be digested. The reader becomes disposed to ask himself, 'What does this mean? How are the ideas related? In which direction do I go now? Is the statement always true?' "

Most important of all, pupils must realize that reading involves thinking—an understanding of what the author is saying, plus an evaluation of the validity of his message and an acceptance or rejection of some or all of his ideas. Reading is not, therefore, a matter of racing one's eyes across lines of print either horizontally or vertically in order to finish another chapter or book. Reading, in brief, is not a process of osmosis: rather it is the reader's assimilation of ideas as he reacts to ideas and feelings expressed through verbal symbols that are arranged in sentence patterns on paper.

A Cultural Bridge Between Japan and U.S.

On January 25–31 the Governments of Japan and the United States joined in a conference at Tokyo to further cultural and educational interchange between the two countries. It was the first conference of its kind in United States-Japanese history and the last of three conferences agreed to by President Kennedy and Japanese Prime Minister Ikeda when the two leaders met in Washington last June (the other two conferences were on economics and science).

The United States delegation was led by Hugh Borton, president of Haverford College. The other delegates were Philip H. Coombs, Assistant Secretary of State for Educational and Cultural Affairs; Aaron Copland, composer; Charles B. Fahs, former vice president, Humanities Division, Rockefeller Foundation; Edwin O. Reischauer, United States Ambassador to Japan; Clarence H. Faust, vice president, Ford Foundation, and president, Fund for the Advancement of Education; Sterling M. McMurrin, United States commissioner of education; Douglas Overton, executive director, Japan Society, New York; Thomas C. Sorensen, deputy director (policies and plans), United States Information Agency; Alexander Spoehr, chancellor, Hawaiian East-West Center; Willard Thorp, director, Merrill Center for Economics, and professor of economics, Amherst College; Robert Penn Warren, author; and Arthur Schlesinger, Jr., special assistant to the President.

Among the subjects discussed were the cultural and educational problems of the two countries, exchanges of art and books and other materials, area studies by both Japan in the United States and the United States in Japan, the teaching of languages, and the activities of Japanese and United States organizations, both private and official.

The conference reenforced what Philip Coombs calls the bridge of understanding between the two cultures. But governments alone cannot maintain this bridge, he told his fellow delegates on the eve of the conference: "Building a broader bridge . . . is an undertaking . . . more importantly for colleges and universities, professional societies, labor unions, private foundations, and other nongovernmental organizations." He stressed the importance of this undertaking by saying that "few, if any measures are more important in our relations with the Japanese people than expanding and strengthening our educational and cultural ties. We have already come a long way since the end of the Pacific war in broadening this bridge of understanding and increasing the traffic on it in both directions."

FORREST HARRISON

Investment of idle school funds

School administrators use many devices in their efforts to get as much educational service as possible for every tax dollar they spend. Here Dr. Harrison discusses a device school districts are overlooking or not fully utilizing.

BY INVESTING its temporarily idle funds, one small school district in a Midwestern State earned $50,000 in interest in fiscal year 1961—enough to pay the salaries of its school business official, estimated at $7,750, and of 8 teachers at the 1959–60 United States average of $5,135. (I use the term "temporarily idle funds" here because it is, I believe, more precise than the frequently used "surplus funds," which may give the mistaken impression that a district has a large unencumbered balance.) If in 1959 all districts had invested as prudently, the public schools would have been richer by $124 million.[1]

These data incidentally support the theory, fairly widely held, that a business official should save his district an amount of money equal to his salary. That, however, is neither the reason for employing a business official nor the reason for investing funds. Whether the district employs a business official or the chief administrator handles school funds, the primary consideration is the efficient and economical use of funds to attain the goals of the educational program of the district.

We do not know how much interest school districts earn by investing idle funds, as no agency collects this information. The Bureau of the Census, however, collects data on the interest cities earn by investing municipal funds, and these data show us the value of managing public funds efficiently. During the fiscal periods that ended in calendar year 1960, cities spent $15.3 billion and earned $154 million in interest (excluding income from investment of retirement and insurance reserves and similar funds).[2] Since their earnings represent approximately 1 percent of their total expenditures and since some administrative officers and controlling boards prohibit the investment of public funds, many cities must have aggressive investment policies.

We do know that many districts recognize investment as a fruitful source of income, as more effective than reducing the unit cost of supplies (see table). Although these districts are taking advantage of their opportunities to earn additional income, they might earn even more if their business officials planned carefully.

Business officials know that in transacting school business there is seldom a steady flow of cash, that peak periods of expenditures and income seldom coincide. They know, too, that they can control the timing of expenditures to some extent, but not the timing of income. They can, however, generally predict the timing of income, and they should use their knowledge in scheduling the investment of temporarily idle funds. When bonds are sold, school administrators can predict with reasonable accuracy the need for expenditures from the proceeds. Right then, they should invest a part of the proceeds. They should also work out a program for investing idle current funds in such securities as U.S. Treasury bills, bank certificates of deposit, bank time deposits, or other safe, interest-bearing obligations. The interest earned on school funds rightly belongs to the district and not to the depository. Since banks are entitled to remuneration for their services, business officials should protect their accounts by maintaining a balance large enough to avoid payment of service charges.

Data from a small group of Midwest school districts show a great variation among districts in the interest earned in comparison with total expenditures (see table). Here the interest earned is not necessarily related to the total expenditures, since some of the districts had available for investment the proceeds of bond issues

Before coming to the Office of Education in June 1961 as specialist in the analysis of school expenditures, Dr. Harrison was the first director of finance for the school district of Joplin, Mo. Before that, he was a teacher and a high school principal.

[1] Calculation based on expenditures and balances reported in *Preliminary Statistics of State School Systems*, 1959–60, U.S. Dept. of Health, Education, and Welfare, Washington, D.C., July 1961, p. 4.

[2] U.S. Department of Commerce, Bureau of the Census, *Summary of City Government Finances in 1960*, Washington, D.C., July 26, 1961, p. 6.

and other funds as well as current funds. However, the medium-sized district, which had one of the highest ratios of earnings to expenditures, had only current funds to invest.

Many districts, however, are not investing their idle funds, and they need more than careful planning and a knowledge of their investment opportunities. In some districts community attitudes and regulations restrict or prohibit the full use of funds for the production of revenue. These prohibitions are not necessarily permanent, and the school administrator, supported by the business official, should take the leadership in getting changes made. In some districts he will find that officials of the local depository, members of the school board, and others will strongly oppose any change from no-interest demand deposits of public money to interest-bearing deposits. Even so, there are sound precedents for the change, and the administrator should draw on them to overcome the opposition.

Some State statutes and constitutions do restrict the investment of idle cash. In an examination of the school statutes of 23 States on which information was immediately available in our files, I find that 11 States allow or encourage investment, 8 States mention only the investment of sinking funds, and 4 States do not mention the matter. These four are very likely among the States in which the school districts are dependent or in which the school board or committee does not directly control the disbursement of funds.

Almost all of the 11 States permit district governing boards to buy U.S. Government securities and more than half of them permit controlling boards to invest in various types of local and State securities. Although the statutes of only one State mention time deposits, many States apparently permit districts to accept interest from this source.

Earnings on investment of idle school funds in five Midwestern school districts, fiscal year 1961

(All figures are rounded to make comparison easy)

School district	Total 1961 expenditures	Interest earned	Salary of business official	Levy needed to raise an amount equal to interest earned [1]	Interest earned as a percent of total expenditures	Ratio of interest earned to salary of business official
Dist. A (small)	$5,000,000	[2] $50,000	[3] $7,750	$0.94	1.00	6.5 : 1
Dist. B (small)	5,000,000	[4] 50,000	13,000	.45	1.00	3.8 : 1
Dist. C (small)	3,000,000	17,000	7,300	.30	.57	2.3 : 1
Dist. D (medium)	7,000,000	77,000	8,000	.63	1.10	9.6 : 1
Dist. E (large)	24,000,000	140,000	9,330	.43	.58	15.0 : 1
Dist. F (large)	28,000,000	382,000	15,773	.42	1.36	24.2 : 1
Dist. G (large)	35,000,000	283,000	10,680	.37	.81	26.5 : 1
Dist. H (large)	41,000,000	436,000	16,250	.25	1.06	26.8 : 1

[1] Per $1,000 of assessed valuation.
[2] Includes some interest on retirement funds.
[3] Estimated.
[4] All funds invested were proceeds from the sale of bonds.

In 44 of the 50 States and the District of Columbia it is possible to invest bond issue proceeds not immediately needed. Information about this problem was not available from two States, and consideration of it does not apply to circumstances in Delaware or the District of Columbia. In the remaining 3 States there is no specific authority for or prohibition against investment of bond proceeds.[3]

In addition to their restriction on investments, States have other requirements that sometimes unnecessarily complicate the management of school funds and, indirectly, the investment of them. For example, some State statutes require districts to keep various school funds in separate bank accounts. This type of stewardship is no longer needed, if it ever was, since present accounting methods make it easy to keep separate records for various funds and to maintain all money in one bank account. This is not to say that fund accounting is not important: it is and it should be continued. Fund accounting for debt service and teachers' salaries is particularly important so that lenders and teachers may be assured of payment.

IF LOCAL districts are to make efficient use of their funds, they need the cooperation of all concerned. State legislatures should consider removing legal bars that make investment of idle funds difficult or impossible. State departments of education and other State agencies should give technical assistance to local units. It is possible that the U.S. Treasury would help by making available special securities to meet the needs of school districts. Local school administrators should make the changes necessary to facilitate investments; they should consider interfund transfers for investment and use this device where necessary. In all of their financial dealings, business officials and other school administrators should maintain safeguards to protect the credit standing of their districts.

[3] Albert R. Munse and Eugene P. McLoone, *Public School Finance Programs of the United States, 1957–58.* U.S. Department of Health, Education, and Welfare. Office of Education, Miscellaneous No. 33. Washington, D.C. U.S. Government Printing Office, 1960.

FRANK LINDENFELD

Teacher turnover in the public schools, 1959–60

AS MUCH AS any problem in education the turnover of teachers troubles schoolmen. In towns and cities, State departments of education, and teachers colleges throughout the country they ask the same question year after year: Will there be enough qualified teachers to staff our classrooms? In search for answers to this question, the Office of Education conducts a biennial survey of teacher turnover in public schools. Here Dr. Lindenfeld summarizes some of the data from the 1959–60 survey. Later in the year the Office will publish a full survey report. For data on the previous survey, see Teacher Turnover in Public Schools: 1957–58, *by Ward S. Mason and Robert K. Bain (Circular No. 608, OE–23002).*

BETWEEN the fall of 1959 and the fall of 1960 approximately 193,200 public school teachers left their positions and 242,300 were hired (see table). In other words, for every 100 teachers in the classrooms when school opened in 1959, 16.8 left their jobs during the year and 13.4 were hired.

Of the incoming teachers, 45 percent had never taught in public schools; 23 percent were reentering teachers who had not taught in public schools the previous year; and 32 percent transferred from other public schools.

The data we have on types of separations are in some ways less satisfactory than those on the sources of incoming teachers. Although school systems are able to supply counts of *total* separations and of some *types* of separations, many of them cannot report on the subsequent employment status of those who leave. This was true in 1959–60, for just under 65 percent of all separations were classified as residual "other separations." Of the other 35 percent, 9 percent went on leave of absence; 8 percent retired; 2 percent died; 13 percent were dismissed; and 3 percent changed to a nonteaching job in the same school system.

DR. LINDENFELD handled the Office of Education survey of teacher turnover from 1959 through 1961. Before coming to the Office, he taught sociology at Middlebury College and the University of Massachusetts. He is now assistant professor of sociology at the University of Maryland.

The turnover survey obtained information on several *types* of separations. From this information it is possible to draw some conclusions on the subsequent status of some of the teachers who left school systems in 1959–60. Not counting the 3,100 teachers who died during the year, we can be reasonably sure of the subsequent status of only two categories:

1. *The 6,000 teachers who changed to nonteaching jobs in the districts in which they had been teaching.* This figure should be interpreted as a minimum because of the possibility that not all who changed were reported as separations; furthermore the figure does not include those changing to nonteaching jobs in different systems. Given the structure of American education, such upward movement from classroom to supervisory positions can be considered normal; it does, however, create teaching vacancies.

2. *The 77,000 teachers who transferred to other public school systems.* We base this figure on the assumption that nationally the number of transfers *into* school systems should equal the number of transfers *out*. Most of these transfers were probably included among the 126,600 "other separations," but not necessarily all, for some teachers who retired or were dismissed might have transferred to another district.

ALL the figures mentioned so far represent *gross* turnover; they count transferred teachers in both the total additions and the total separations. From the viewpoint of the national manpower situation, we may also speak in terms of *net* figures. We define the net loss to the profession as the total number of separations less the total number of transfers. Not counting transfers, a net total of 165,300 persons entered public school teaching during the year and 116,100 left the profession. The rate of loss to the profession was therefore 8.1 percent. This rate is computed by using the number of teachers on the staff at the opening of classes, fall 1959, as the base; in the 1957–58 turnover study, the rate was computed by using the *average staff* as the base.

The term "loss to the profession," as used here, refers only to classroom teachers in public schools and not to the larger field of education. The 1959–60 survey, like the previous one, was concerned exclusively with

classroom teachers. Some teachers who continued in education are nevertheless counted among those lost to the teaching profession: 1) Those changing to nonteaching jobs, such as principal, in the same school system as well as those changing to nonteaching jobs in other public or private school systems; 2) those changing to teaching jobs in nonpublic schools or in higher education; and 3) those going on leaves of absence. This means that many of those included in the loss figure are not necessarily lost to education. Furthermore many of those who did leave public school teaching during 1959–60 may return to teaching at a later date; they might then be counted among the "reentering" in some future survey.

Estimated number, and standard error of estimate, of the teaching staff and teaching staff changes in public elementary and secondary schools, 50 States and D.C., fall 1959 to fall 1960

Teaching staff category	Number of teachers [1]	Standard error [2]
	In thousands	In thousands
Staff, opening of classes		
Fall 1959	1,439.5	11.9
Fall 1960	1,488.6	12.5
Staff changes, fall 1959 to fall 1960		
Total hired	242.3	4.0
Entering	109.3	2.2
Re-entering	55.8	1.8
Returning from leave of absence	12.4	.5
Other	43.4	1.7
Transferring	77.0	2.1
Total separated	193.2	3.3
On leave of absence	16.6	.5
Retired	16.3	.5
Deceased	3.1	.2
Dismissed	24.4	1.6
Changed to a non-teaching job in the same district	6.0	.4
Other, n.e.c.	126.6	2.5

[1] Because of rounding, detail does not necessarily add to total.

[2] The standard error figures reported above should be interpreted as follows: They are a measure of the extent to which the estimate derived from the sample differs from the actual value. For example, during 1959–60 there were an estimated 242,300 teachers hired for the public schools. The standard error of that estimate is 4,000. If this survey were repeated under the same conditions a large number of times, and each time we constructed a confidence interval by adding and subtracting two standard errors to the sample estimate, we would expect 95 percent of such intervals to include the actual value. Thus, we can say with a 95-percent probability of being correct that the actual number of accessions to the public schools in 1959–60 was between 234,300 and 250,300.

OF ALL the turnover figures we have discussed here, the gross separations and additions probably reveal most clearly the staffing situation in individual local school systems. To get the picture, we need only compare the proportion of the additions used to replace those leaving with the proportion used to provide for growth in enrollment, in curriculums, etc. Of the 242,300 teachers hired by local public schools, four-fifths (193,200) replaced teachers who left and one-fifth (49,100) staffed new positions. Although we have no data on the time of year during which these changes took place, the 1957–58 survey showed that slightly more than 80 percent of all changes took place during the summer months. Assuming that this pattern is relatively stable from year to year and that the majority of the 1959–60 additions and separations took place in the summer of 1960, we can say that the effect of the staff changes was largely felt at the opening of the 1960–61 school year, that the great majority of the number hired during 1959–60 were new to their jobs in 1960–61.

Another way of looking at these data from the standpoint of the local districts is to consider the composition of the staff in the fall of 1960 as compared to the staff of one year earlier. The question here is how many of the teachers employed at the beginning of the 1960–61 school year had been on the same staff the year before and how many had been newly hired. These figures summarize the answer:

Teaching staff category	*Number (in thousands)*	*Percent*
Staff at fall 1960 opening of classes	1,488.6	100.0
Holdovers from 1959–60	1,246.3	84.0
Total additions	242.3	16.0
Entering	109.3	7.3
Reentering	55.8	3.8
Transferring	77.0	5.2

When public schools opened in the fall of 1960, 16 percent of their teachers were new on the job. Since only 5 percent of all the teachers employed had transferred from other public school districts, almost 11 percent had been recruited from other sources: Colleges and universities; private schools; other occupations in education and outside education; homemaking; military service; or retirement.

Another article on teacher turnover will appear on these pages next month. J. Scott Hunter will make an analysis of turnover among beginning teachers.

J. Dan Hull and Howard H. Cummings

How fare American youth in 1962?

THE CULTURALLY DEPRIVED PUPIL—the one who is the core of our dropout problem—is as old as education. Under such names as the nonacademic pupil and the slow learner he has endlessly appeared and reappeared in our educational literature. He has rarely been popular in school, school has rarely been popular with him, and now, in this day of talent hunts and pursuings of excellence, he is well on his way to becoming a pariah.

Seen as a symbol, he embodies all the problems of American youth. But these problems are not new. A quarter of a century ago, in 1937, the American Youth Commission of the American Council on Education published a book, *How Fare American Youth?* which reported a survey of the problems of youth in the middle 1930's, the depression decade. At least 40 percent of the young people between 16 and 24 years of age were out of school and unemployed. Many of these had appalling health problems, including venereal disease. A great many could barely read and write; many were delinquent; many of the girls had borne illegitimate children. So disturbing were the conditions that the commission called on the people of the United States to unite in an effort to help these young people become what they had both a right and an obligation to be—full-time workers, responsible members of their families, and constructive members of their communities.

This report made disturbing reading back in the thirties; today, if it is read along with James B. Conant's report on *Slums and Suburbs*, it gives an historical perspective on the problems of American youth that is even more disturbing than the effect it had originally. Taken together, the old report and the new show that in the past 25 years, despite the careful identification of the problems in 1937 and the wide national attention focused on them then, the same problems have persisted. If anything, they are worse.

They are as bad as they are, we suggest, because between 1937 and 1962 they were neglected. Either the Nation's attention was caught by other circumstances or the problems themselves were temporarily obscured by those circumstances. When the 1937 report was issued, two Government agencies were in existence which had been especially designed to help unemployed young people—the Civilian Conservation Corps and the National Youth Authority—and as long as they were needed they continued to provide employment paid for by public funds. Both, however, were liquidated when World War II came along with its insatiable demand for manpower; and in the full-employment years of the postwar period, there seemed to be no need for agencies like these or for special programs to employ young people. At the same time the schools increased their holding power, so that in 1960 they kept at least 60 percent of their students through high school graduation, in contrast to less than 36 percent in 1935.

For those who did drop out of school, however, the problem of finding and keeping a job got harder by the day as more and more technology changed to the workaday world and the need for trained workers increased. Today the number of young people both out of school and out of work is again dangerously large. Juvenile delinquency has taken on frightening proportions, illegitimate births and venereal diseases are still increasing among the young, and the rate of rejections for military service continues high. Two of these problems are now so grave that the President has appointed two commissions to study them—one on the employment of youth, one on juvenile delinquency. The public's growing awareness of the situation has recently resulted in legislative proposals in the Congress to reestablish both CCC and NYA types of programs, under the general direction of a youth conservation corps.

Any realistic effort to improve the condition of underprivileged young people will of course include the schools, but the schools cannot solve the problem alone. Such circumstances as the rate of economic growth

J. D. HULL

H. H. CUMMINGS

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THE MISCHIEVOUS RESULTS, 1937 AND 1961

It is unnecessary to enlarge upon the mischievous results of the lack of a steady income, even a modest one, among young persons of working age. . . . It has been plausibly suggested that insufficient spending money is a large contributing factor in the increasing incidence of crime among youth. . . . It seems highly probable that many criminal acts have their origin in the thwarting of youth's natural desire to acquire "purchasing power."—How Fare American Youth? (1937).

Although the causes of juvenile delinquency are camplex and their is no one solution, employment opportunities are clearly important. A youth who has dropped out of school and never has had a full-time job is not likely to become a constructive citizen of his community. Quite the contrary. As a frustrated individual he is likely to be antisocial and rebellious, and may well become a juvenile delinquent.—Slums and Suburbs (1961).

and the progress of automation and mechanization determine the number of jobs available. Employers and unions set up barriers, including racial discrimination, against employment of youth. And it is a hard incontrovertible fact that the demand for uneducated and unskilled workers is small and will probably grow smaller. Clearly, little progress can be made until, as James B. Conant indicates, a close relationship exists among the schools, employers, labor unions, social agencies, and employment offices.

What is more, these must all work together toward a goal much higher than the problem at first sight indicates. The goal should be nothing less than this—to change the cultural pattern of the deprived group so that this segment of our population becomes an integral rather than a marginal part of our industrial society. Success will require money, hard work, and dedication. The road will not be easy, but once the public is convinced that the problem is worth attacking and recognizes that any successful attack will be expensive, we shall have taken the first important step. For further advances, new thoughts and bold experiments are essential.

The effort must involve the whole Nation, for the problem is nationwide. True, the problem is particularly pressing in certain places, but the community is rare that does not have at least a few children in the unhappy category of the deprived. Teachers and school administrators in small towns cannot afford to read *Slums and Suburbs* with complacency: children on the wrong side of the tracks anywhere can suffer deprivation.

At the same time it is necessary for State and national leaders to find those places where deprivation is most common, where education has generally failed to break the cycle of low education, low income, dependency, poor health, low aspirations, cultural mediocrity, and civic apathy which confines many parents and into which they are also drawing their children. Three areas deserve special attention.

First, the slums of large cities, which contain what are probably the largest concentrations of culturally deprived children. Dr. Conant, who has drawn on special studies in slum neighborhoods, dramatically states the size of the problem there:

> In a slum area of 125,000, mostly Negro, a sampling of the youth population showed that roughly 70 percent of the boys and girls aged 16 to 21 were out of school and unemployed.

What these numbers represent in human waste and adolescent misery is hard to calculate. The potential danger in them is described by Dr. Conant as "social dynamite."

The plight of youth in these neighborhoods was the subject of a conference held in Washington, D.C., during May 1961. Some sessions of that conference were spent in hearing and discussing what fourteen large cities are doing about the problem in the course of their participation in a project supported by the Ford Foundation—a project which, though it does not embrace all city slums, directs attention to circumstances under which the schools have encountered some of their major educational problems. What these cities have recently accomplished represents a new awakening to the problems of culturally deprived people.

Second, farm areas where mechanization and changing uses for the land are creating population surpluses. In a certain rural county, one study estimates, only 4 out of every 10 boys living there now can hope to stay on and make a living—1 at farming, the chief industry, and 3 at some other kind of work. The other six, in order to get jobs, will have to move to another community. For the girls the opportunities will be even fewer. In their search for work, most of the displaced young people will head for the cities, which already have a bad situation on their hands: many of yesterday's inadequately educated rural young people are today's adult inhabitants of city slums.

The migration from country to city can be expected to continue, but if urban slums are to improve, the rural slums which feed them must be improved too. At the same time, there is little incentive for rural communities to make a large educational investment in children who must leave the community for jobs as soon as their education is completed.

Third, depressed areas, which center on abandoned factories, worked-out mines, and other one-time establishments. In one such community, a recent survey found 15,000 unemployed persons. Here, during the next decade, an estimated 20,000 persons will reach the age of 18, but barely half of them are likely to find jobs at home; the rest will have to choose between unemployment and migration.

Many such communities, both urban and rural, have a long history of depression behind them; and many of their boys and girls come from families that for generations have been poor and barely literate. Whatever skills they have are for tasks that have disappeared, and the best they can do is to join the crowds competing for unskilled work at the bottom of the job ladder.

To say that the schools alone cannot solve this complex and deep-seated problem is not to say that they must wait for a nationwide strategy. Already their basic task is clear: there are two things they can do to reduce the number of unemployed young people.

First, they can work to keep boys and girls in attendance until they graduate from high school. With each one they keep in school they reduce by one the number of idle young people on the streets. This is a task, however, in which the schools have had to run just to keep up: in the past 25 years, they have increased their holding power by approximately 1 percent a year, but the gain has been more than offset by increases in the birthrate. At present about two-thirds of all children stay on to graduate from high school, and as long as this rate applies to children born when the birthrate was only 3 million, the Nation will have 1 million dropouts a year. But soon the retention rate will have to be applied to an even larger population of children. The annual birthrate has now risen to well over 4 million, and even if in the next 10 years the schools could increase their holding power to 75 percent, the Nation would still have 1 million dropouts. Obviously, the school must quickly and sharply step up its holding power.

Second, they can prepare the student for working at a job; that is, they can improve his general work habits, teach him specific skills, and

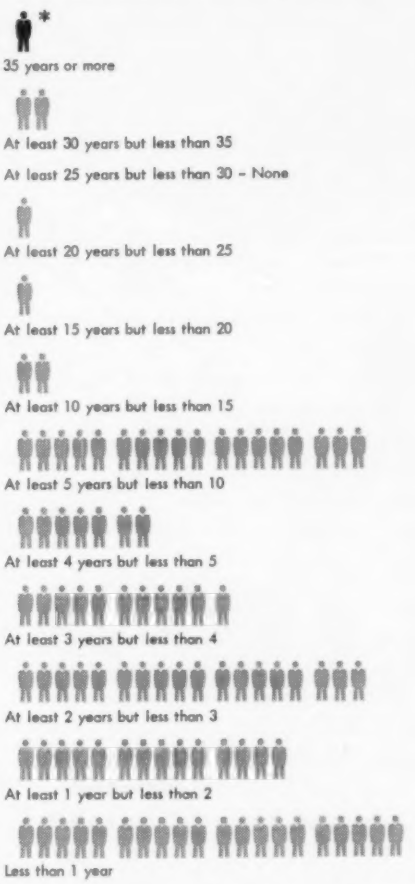
Statistic of the Month

Postscript: Farewell to the Man at the Top of the Chart

Emery M. Foster is the man who began this column for ***School Life*** and then, month after month, kept it coming. He kept it coming for 2½ years, and the thread ran smooth to the end, for he never missed a deadline.

This month's Statistic is the last he prepared. On Nov. 30, 1961, Mr. Foster retired from his work in the Office of Education and left it, along with the writing of this column, to other hands. Is it not fitting here, as a postscript to his labors, to put Mr. Foster himself into a chart? There he stands, at the very top, marked with one of his own asterisks, the man who on the day he retired had served the Educational Statistics Branch longer than anyone else—38 years and 4 months. He had worked under 9 commissioners of education and 7 Presidents of the United States; and the span of his career covered more than one-third of the 94 years the Office of Education has been in existence.

As the chart shows, most of Mr. Foster's fellows in the Educational Statistics Branch are young in years of service to the Branch. The demands for statistical services have risen sharply in the past decade, and the Branch has grown in response. Mr. Foster deserved to be at its head in any chart, and though he now is gone, the record of his service remains to encourage all who come after him.


35 years or more
At least 30 years but less than 35
At least 25 years but less than 30 – None
At least 20 years but less than 25
At least 15 years but less than 20
At least 10 years but less than 15
At least 5 years but less than 10
At least 4 years but less than 5
At least 3 years but less than 4
At least 2 years but less than 3
At least 1 year but less than 2
Less than 1 year

Staff of the Educational Statistics Branch, Office of Education, grouped by the number of years of service in the Branch, November 1961

*Emery M. Foster, who retired on Nov. 30, 1961

raise his educational level. It is not enough—and few teachers will be content—merely to keep him off the streets. Keeping him in custody may help the community temporarily, but this alone will do the young person little good. After all, the jobs he will aspire to when he leaves school will be sought by others too, some of them highly skilled and able—among them, married women, old persons, and persons wanting supplementary jobs—and if schooling has not added to his competence, he is likely to be the last to be hired and the first to be laid off.

To these tasks the schools bring a good deal of sophistication. They have learned in recent years from a number of studies what cultural deprivation does to a child's school achievement. They know, for example, that children from slums and other communities characterized by poverty, social disorganization, and discrimination tend to fall off in their school work after the third or the fourth grade; that at that point the street begins to take over, and the child's out-of-school education becomes the product of a poor home and neighborhood.

With their broadened understanding of the problem, the schools are finding themselves challenged to help these pupils to a higher sense of values and to nobler aspirations than those encouraged in them by their relatives and neighbors. This is a formidable challenge, and the meeting of it will require much more money than is currently being spent on schools in either urban or rural slums. At present, Dr. Conant estimates, cities are spending, on the average, less than half as much per pupil as the suburbs, which spend about $1,000 a year. His conclusion is that cities need to spend even more than $1,000.

For the schools as for anyone, however, the defining of a problem and the taking of its measure is easier than to find good practical solutions. Proposals to revive measures used back in the 1930's suggest that attacks on this problem in the past 25 years have not been characterized by imagination and resourcefulness. Unfortunately, this is generally so. Here and there, however, are schools which have worked out some effective practices; and these practices recommend themselves as a starting place for others. Among them are these:

1. Expansion of vocational education to include training for jobs most likely for culturally deprived students, slow learners, and other potential dropouts. Such expansion is taking place, but it is taking place slowly. So far, only a few schools are offering courses for the service occupations, yet these are the very occupations which young people from the lowest quarter of the school population are most likely to follow.

2. School-work programs. Programs of distributive education use an effective method of bridging the gap between school and work—a method which makes it possible for the student to hold an outside job under school supervision at the same time that he continues his course through school. These and similar programs, however, have reached only a small proportion of the young people for whom they are most helpful. Such programs are expensive: to be educationally defensible they must be well planned and supervised. The subjects the student takes in school should be directed toward improvement of the skill and understanding he needs on the job. The school must have the cooperation of both labor and employers. It takes time to build up these programs and hard work to maintain them, but they can accomplish much.

3. A program of subsidized work experience for young people unqualified for even the lowest rungs of the occupational ladder. Some pupils lack the confidence, the work habits, and the personal qualities necessary to qualify them for regular employment. They are the ones who need work experience most, but they cannot be selected for the regular work-study programs. If the school has funds available to subsidize public and nonprofit institutions while they give work to these young people and instruct them on the job, it can lead some of them across the gap between school and work. Subsidized work experience programs, however, have two limitations: they are expensive, and they can accommodate no more young people than they have job openings for.

4. Greater attention to pupils in the elementary schools. Most school dropouts, studies show, had serious learning difficulties in the early grades and few learned to feel at home in any part of the school. Because failure early becomes a habit, the elementary school has a special responsibility to give its pupils the stimulation their cultural background lacks. Potential dropouts can be identified early, and the school should start fundamental and long-range attacks on the dropout problems when its pupils are 6 and 7 years old rather than when they are 16 and 17.

5. Programs of inservice education for teachers of culturally deprived children. Teachers and administrators need to understand the complexities and difficulties of the task of teaching culturally deprived children; they need to be free of all ethnic and class prejudices. Obviously it is not easy to find teachers completely qualified in these respects, and some schools have developed effective inservice education programs for helping teachers to acquire the insight they need for understanding the children and their problems and the skills they need for teaching them.

These programs can help teachers plan lessons and select or devise teaching materials that make sense to the pupils in terms of their experiences

and hopes, to relate both lessons and materials in some way to the knowledge the pupils already possess. It is relatively easy to motivate pupils to work toward goals which they accept; it is much more difficult to motivate them to work toward goals they do not accept. It is relatively easy to guide the behavior of pupils who live 24 hours a day within home-school-neighborhood groups that are part of the same culture and have the same goals, loyalties, symbols, and mores; it is much more difficult to guide pupils whose days are divided among groups within different cultures and with different, even conflicting, goals, loyalties, and mores.

6. *Guidance services.* The culturally deprived young person needs special encouragement and help in getting a job, and this the school can give him by providing guidance services to smooth his transition from school to work. It can point out the job opportunities, help him find and develop his strong points and find and remedy his weaknesses, teach him how to apply for a job and, once he has got one, to meet its requirements.

These measures indicate the special interest the schools will have to take in the culturally deprived child if they are to make a substantial contribution to a larger effort to wipe out idleness, poverty, and crime. The alternative is an uneasy acceptance of a large group of undereducated youth who are unemployable in a dynamic economy that actively seeks skilled and educated workers. Any improvement which can be made through education will be a clear national gain; certainly when the choice is between an extra educational effort and widespread enforced idleness, there is little to lose. And if it is true that the schools should be concerned about the individual who needs education most, then the unpromising pupil, the culturally deprived pupil, has a strong claim on their attention.

Statistic of the Month

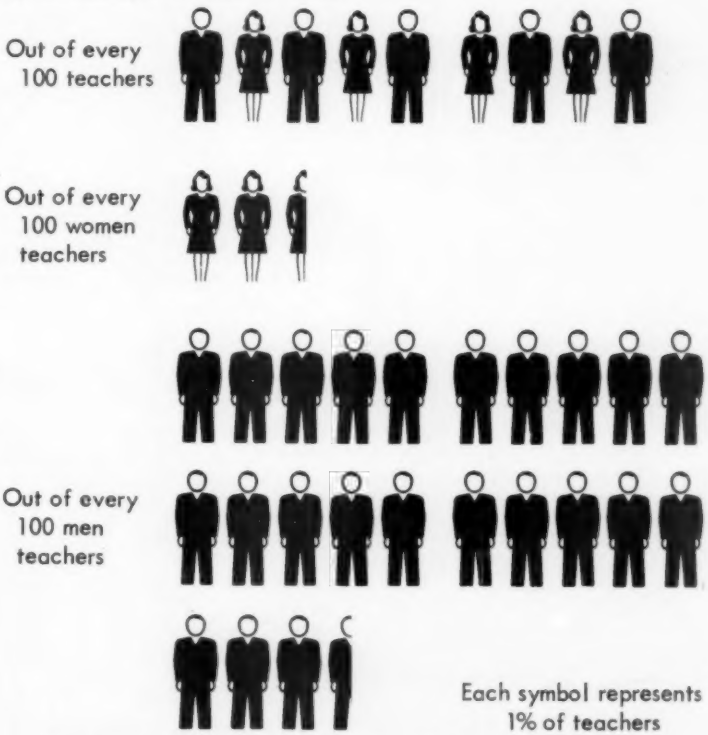
Teachers with supplementary jobs

JUDGING by the Labor Department's report on multiple jobholders in December 1960, teachers below the college level are more likely than other workers to hold a second job. Of all the 66 million persons employed during the week of December 4–10, about 4.6 percent had two or more jobs; of the teachers, a percentage almost twice as large—8.9 percent had more than one job.

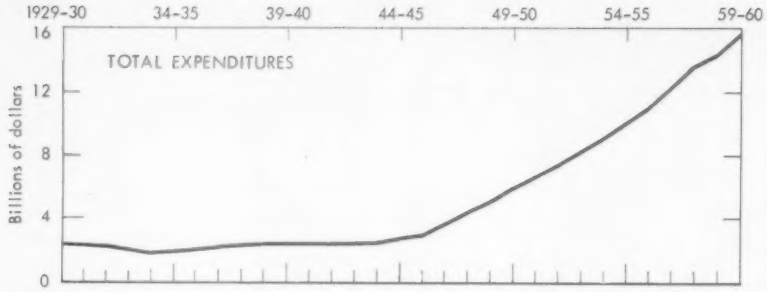
Most of the teachers with second jobs were men: 23.5 percent of all men teaching below the college level—but only 2.5 percent of the women—had at least two jobs. In no other primary occupation group did more than 8.9 percent of the men have supplementary employment during this week in December.

For some teachers the second job meant another employer, such as a storekeeper who hired them to do clerking on Saturdays; for others it meant self-employment, such as tutoring private students. For most—for four out of five of the men teachers with supplementary employment—the second job was a white-collar one. As to the hours spent on it, the Labor Department says, "Relatively few persons with primary jobs in educational services, most of whom are teachers, worked mostly during weekday working hours on their second job; large proportions worked nights and on weekends."

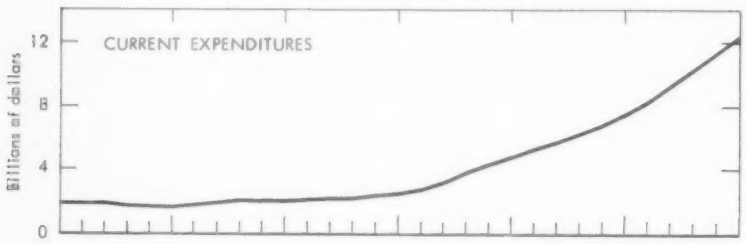
Further data on teachers and workers in other occupations are in Special Labor Force Report No. 18, Multiple Jobholders in December 1960, by Jacob Schiffman, from the Monthly Labor Review, reprint No. 2373, U.S. Department of Labor, Bureau of Labor Statistics, Washington 25, D.C.—Emery M. Foster, chief, Research Studies and Surveys Section.


Out of every 100 teachers
Out of every 100 women teachers
Out of every 100 men teachers
Each symbol represents 1% of teachers

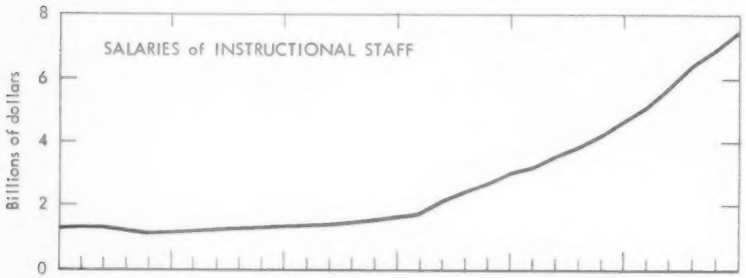
Teachers below college level who held supplementary jobs, December 4–10, 1960



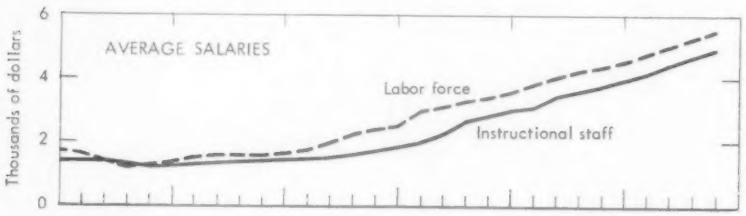
TOTAL EXPENDITURES for public schools include those for current operation, capital outlay, and interest on school debt. In 1959–60 they amounted to 4.1 percent of personal income, $88.12 per capita, and $387,563 per school administrative unit.



CURRENT EXPENDITURES for elementary and secondary day schools in 1959–60 were almost double those in 1952–53. Expenditures per pupil in average daily attendance, the most acceptable measure of school support, averaged $376 in 1959–60.



SALARIES of instructional staff accounted for 60.3 percent of current expenditures in 1959–60. This proportion has declined from a high of 70.4 percent in 1933–34, indicating that salaries are not increasing as fast as other items in the budget.



AVERAGE SALARY of an instructional staff member has, since 1942, been about 20 percent less than the average personal income of a worker in the labor force. In 1958–59 the average salary was $4,959; the average personal income, $5,514.

Financial trends i

CLAYTON D. HUTCHINS AN

The 8 charts shown here have been selected from among the 100 in *Trends in Financing Public Education*, by Clayton D. Hutchins and Dolores A. Steinhilber, Circular No. 666, 136 pp., 1961 (OE–22015). The new publication presents basic data on school finances for a 31-year period to assist local, State, and Federal officials in making plans and projections for public education, for example, in preparing budgets, recommending appropriations, and determining tax requirements.

EVERY SHRED of evidence, every projection, and every estimate on public school expenditures point to one conclusion: The financing of public education will be a continuing problem throughout the 1960's. No one can say how the problem will be solved, but all will agree that the least we can do now is to plan intelligently year by year.

We can plan intelligently and realistically if we use the information available to us, if we recognize the trends reflected in recent data on financing public education services. The charts presented here not only point out the directions expenditures have taken in the past 31 years but also point to the future. We have no assurance that predications based on these trends will be accurate, but we are reasonably sure that such trends cannot be ignored if school services are to be extended and improved.

These charts, like many of the other 92 in the Office *Trends* study, show that in the 15 years from 1945 to 1960 expenditures increased rapidly. There are

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DOLORES A. STEINHILBER

several reasons for the increase; among them are the changes in the schools—for example, the larger number of pupils and the new and improved educational services demanded by the public—and inflation in the national economy.

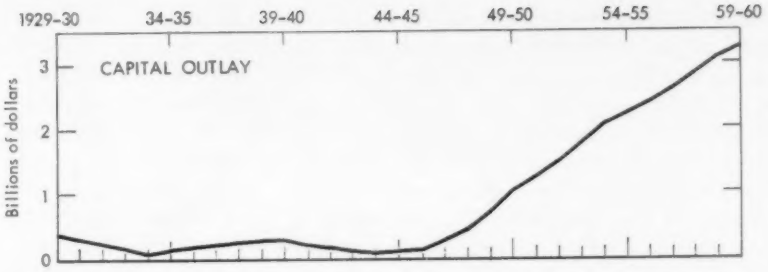
But increases in school revenues and expenditures are related not only to conditions in this 15-year period but also to conditions in the preceding 15-year period, from 1930 to 1945. For example, much of the schools' financial activity since 1945 can be directly attributed to conditions in the years before 1945, when first the depression and then the war effort diverted attention from improving education. At the end of that period there was an upswing in school financial activity to make up for the long period of inactivity.

The charts on these pages show an upward trend in school funds since 1945—toward larger and larger total expenditures and larger and larger total revenue receipts. The charts also show that not all school accounts have shared equally in the gains. The variations flag our attention—and some brief comments about them will invest them with more meaning:

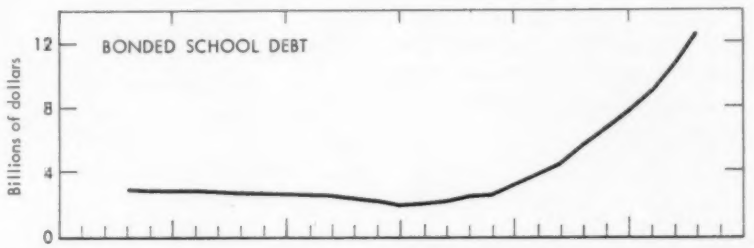
Expenditures per pupil have risen at a slower rate than total expenditures because part of the total has gone to provide for increased enrollment.

Expenditures for salaries of the instructional staff have risen at a slower rate than current expenditures. Very likely

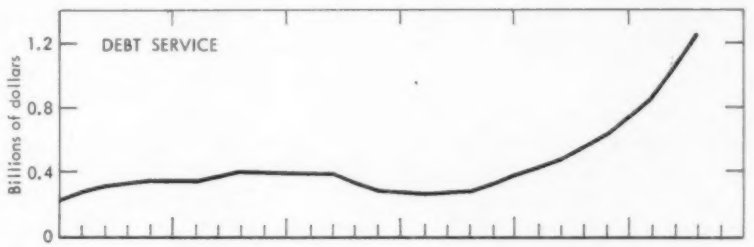
MRS. STEINHILBER joined the School Administration Branch of the Office of Education as a research assistant in school finance in December 1959. Before coming to the Office, she was an educational counselor at the Western Reserve University for 4 years. She has also taught school in Hawaii.



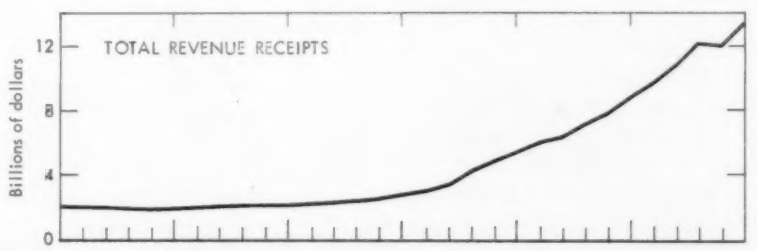
CAPITAL OUTLAY for new school plants, including small amounts paid from current funds and large amounts from borrowed funds, has represented about 21 percent of total school expenditures over the past 9 years.



BONDED SCHOOL DEBT, incurred to provide for school-plant facilities in response to the critical classroom shortage, is about four times larger than it was in 1950. In 1958 it represented about 30 percent of all debt of local governments.



DEBT SERVICE includes payments for interest on school debt and for the repayment of the principal. By 1957–58 the amount required for debt service was four times the amount typically required from 1930 to 1950.



TOTAL REVENUE RECEIPTS comprise the revenue public schools obtain from all local, State, and Federal sources. In this 31-year period, local sources contributed 65.1 percent; State sources, 32.7 percent; and Federal sources, 2.2 percent.

this is because other items in current costs—administration, supplies, equipment, health services, operation and maintenance of plant, pupil transportation, and insurance—are advancing more rapidly. School boards cannot easily regulate expenditures on some of these items because prices are affected by factors in the general economy.

The difference between the average personal income of an employed member of the labor force and the average salary of an instructional staff member, who on the average has higher educational qualifications, explains in part why schools have trouble recruiting and maintaining competent staffs.

Expenditures for construction of additional classrooms have increased more sharply than for any other school account except debt and debt service. The sharp upswing shown in the capital outlay chart would be even sharper if expenditures for school plant by local and State school building authorities and by nonschool county, city, and State agencies were included.

Expenditures for repayment of debt and interest on school debt are increasing more rapidly than school revenue. As expenditures for school plant take a larger proportion of the school budget, they leave a smaller proportion for current operations, including teachers' salaries. This long-term financing of school construction not only requires large amounts of revenue for payment of interest but also leaves local school districts with lower credit ratings and reduced borrowing capacity, both of which make it difficult for them to finance the construction of additional classrooms that they will certainly need in the next few years.

As total revenue receipts have increased, the proportions from State and Federal sources have increased while the proportion from local taxes has decreased. For the 1959–60 school year the total from all sources averaged $306 per child of school age and represented about 3.5 percent of the personal income.

THERE IS STRONG EVIDENCE that many of the trends apparent in school financial data will continue upward throughout the 1960's. Much of the evidence is incontrovertible: costs will rise as schools provide for increases in enrollment caused by the high birth rates of recent years and by the continuation of larger proportions of the population in school for longer periods; costs will rise as schools extend and improve their services to supply the skilled and highly educated manpower the Nation needs.

AD *Minutes* Briefly noted--- for the busy School Administrator

Material for this department is prepared by the staff of the School Administration Branch, Division of State and Local School Systems.

Invest your idle cash. The Advisory Commission of Intergovernmental Relations—composed of mayors, governors, State and Federal legislators—has this advice for State and local officials:

Remove constitutional and statutory prohibitions against investing public funds; facilitate temporary interfund transfers so that cash can be managed effectively; give local units technical assistance; and publicize regular and special offerings of the U.S. Treasury. The Commission makes these recommendations in its recent report "Investment of Idle Cash Balances by State and Local Governments."

★ ★ ★

State support. The Florida Legislature has provided for higher salaries for teachers by removing the appropriation ceiling on the county school sales tax fund and authorizing a continuing appropriation of $550 for each instructional unit, by increasing instructional salaries by $200, and by initiating a program of "competence awards." A teacher participating in the awards program who is rated among the top 30 percent of the teachers in his county and scores at least 600 on the common examination of the National Teachers Examination (or does as well on an examination approved by the State board) will receive $500 from the State funds in addition to his regular salary.

★ ★ ★

Changes in Hawaii. The State Legislature of Hawaii, the only State in which schools are not locally controlled, is changing the structure of its school administration. The Governor will appoint the State board of education from a panel of names submitted to him by lay school advisory committees on each of the four major islands; and the State board, rather than the Governor, will appoint the chief State school officer.

★ ★ ★

Too many districts. The reorganization of school districts in South Dakota has not kept pace with the changing pattern of social and economic life, the *South Dakota School Boards* says. And it supports its statement with these

facts: 1 out of every 3 districts does not operate a school; 1 out of 3 of the 1,000 nonoperating districts does not levy a district tax for public education, although county equalization and high school tuition levies are made against nonoperating districts; small nonoperating districts aggravate problems of teacher supply, the distribution of State aid, and provision of special services for exceptional children.

★ ★ ★

State board in Alaska. If the Alaska State Legislature accepts the recommendations of a recent study, the control of education will be transferred from a State commissioner of education appointed by the governor to a State board of education with policy-making powers. The study, financed by a $50,000 Ford Foundation grant and sponsored by the State Board of Education, took nearly a year to complete and was conducted cooperatively by professional educators and a lay advisory council.

★ ★ ★

Machines can save money. In an effort to reduce the cost of keeping teachers' registers—now probably $1 million a year—the Maine State Department of Education is trying out automatic data-processing equipment in one of the Augusta high schools. If the experiment is successful, the department plans to offer technical assistance and planning service to other local schools.

★ ★ ★

Property insurance. A new form of fire insurance contract, the Public and Institutional Property Form, sometimes called "Pip," has many advantages over other standard contracts: It eliminates some restrictive conditions, offers blanket treatment, provides broader coverage, and is said to reduce standard premiums by as much as 30 percent.

In States that have approved the form—all but 5 or 6 States have done so—a school district can insure all its buildings and their contents against loss or damage by fire, the perils included in extended coverage, vandalism and malicious mischief, and sprinkler leakage—all under one policy for one face amount.

The full amount of the insurance applies to the property where loss occurs. Coinsurance is eliminated for a period of 1 year and may be eliminated for each year afterward if the district files a schedule of values with the insurance company. Depreciation as a factor in determining the loss or damage is eliminated by attaching a replacement value endorsement.

★ ★ ★

The pupil profits. Does district reorganization make a difference in children's schooling? An interim report of a 17-year study begun at the University of Michigan in 1949 says that it does. The study has found that pupils in five reorganized districts have consistently made greater progress in reading, arithmetic, and science than pupils in five nonreorganized districts and that they enjoy other advantages too—in library services, instructional materials, supervisory services, and special teachers.

★ ★ ★

More money for Texas schools. By voting a 2-percent sales tax, expected to bring in more than $350 million in the next 2 years, the 1961 Texas Legislature has approved the largest single increase for public education in State history. Although schools are not required to use all the increase for teachers' salaries, they may use enough of it to give teachers an average raise of $800.

★ ★ ★

Direct report. Every Wednesday morning staff members of the Georgia State Department of Education broadcast school news over an Atlanta television station. From time to time, Claude L. Purcell, State superintendent, answers questions and discusses school affairs.

Public service. The Cincinnati Superintendent of Schools can be reasonably sure his annual report is read by parents as well as by school officials. The *Cincinnati Post and Times-Star* publishes the report, including illustrations, as a rotogravure magazine.

★ ★ ★

School carpeting. Studies in an upstate New York high school and a Texas elementary school indicate that, under severe conditions, carpeted floors are substantially cheaper to maintain than bare floors and solve many acoustical problems, particularly in schools with programs using noisy equipment.

★ ★ ★

Financing Southern schools. Greater financial effort at the local level plus increased support from Federal and State governments may enable public schools in Southern States to make even greater progress than they have in the last two decades and to close the gap between the South and the rest of the Nation. This is one conclusion of *Financing the Public Schools 1940–60,* published this fall, by the Committee on School Finance of the Southern States Work Conference. In addition to its recommendations for increasing revenue, the report discusses problems in financing, State distribution systems, the progress and status of school budgeting, financial accounting, and reporting practices and procedures.

★ ★ ★

ETV in Chicago. While educators are arguing about the value of in-school educational television, enrollment for televised instruction is growing in some colleges. At Chicago City Junior College, the number of individual registrations for credit courses increased by 15 percent, from 2,014 in the fall of 1960 to 2,517 in the spring of 1961. For the school year as a whole, the increase was even greater.

Florida loyalty oath unconstitutional

ON December 11, 1961, the Supreme Court of the United States unanimously declared unconstitutional a loyalty oath required of teachers by the State of Florida.[1] The Court rejected the oath on the grounds that it was vague and violated the due process clause of the Fourteenth Amendment. Because this is the first loyalty oath case the Supreme Court has decided on these grounds, its ruling further clarifies the constitutional limits which the courts will impose on loyalty oaths. The facts of the case are these. David Cramp, a public school teacher in Florida, did not take the loyalty oath prescribed for teachers by State law at the time of his appointment. Nine years later, when the school board discovered the oversight, he was requested to take the oath. He refused on the grounds that the oath violated his constitutional rights. He then brought suit to have the Florida courts declare the oath unconstitutional and to forbid the school board to discharge him for failing to take it. After the State courts denied Mr. Cramp relief, the U.S. Supreme Court agreed to hear the case.

The oath required the declarer to swear that:

1. He will support the Constitution of the United States and the State of Florida.
2. He is not a member of the Communist Party.
3. He has not lent and will not lend aid, support, advice, counsel, or influence to the Communist Party.
4. He does not believe in the overthrow of the Government of the United States or the State by force.
5. He is not a member of any organization that so teaches.

Counsel for Mr. Cramp conceded that sections 1, 2, and 5 are valid conditions for determining the fitness of a person for public employment and attacked only sections 3 and 4. He maintained that these violated the due process clause of the Fourteenth Amendment by interfering with freedom of speech and association and that they were so vague that the declarer could not be aware of his legal status.

The issue in the case centered on the meaning of the phrase "lend aid, support, advice, counsel, or influence to the Communist Party." What, asked the Court, was the meaning of these words? Could a person who had voted for a Communist legally on a ballot safely sign the oath? Could a lawyer who had represented the Communist Party in court take the oath? Could a journalist who defended the constitutional rights of a Communist safely swear? Does a person who knowingly supports a cause supported also by the Party—such as teacher pay raises and disarmament—give aid, comfort, advice, support, or influence to the Party? Justice Potter Stewart said:

> The very absurdity of these possibilities brings into focus the extraordinary ambiguity of the statutory language. With such vagaries in mind, it is not unrealistic to suggest that the compulsion of this oath provision might weigh most heavily upon those whose conscientious scruples were the most sensitive. While it is perhaps fanciful to suppose that a perjury prosecution would ever be instituted for past conduct of the kind suggested, it requires no strain of the imagination to envision the possibility of prosecution for other types of equally guiltless knowing behavior. It would be blinking at reality not to acknowledge that there are some among us always ready to affix a Communist label upon those whose ideas they violently oppose. And experience teaches that prosecutors too are human.

Justice Stewart, who spoke for the Court, reaffirmed the Court's position that "no one may be required at peril of life, liberty, or property to speculate as to the meaning of penal statutes. All are entitled to be informed as to what the State commands or forbids."[2] The oath subjected Mr. Cramp to two risks: If he took the oath, he might be found guilty of perjury by a court interpreting his actions as falling within the meaning of the statute even though he honestly believed that he had never supported the Communist Party; if he did not take it, he would lose his job.

The Court's decision, however, does not make all loyalty oaths invalid, only the one tested in this case. In fact, the Court expressly said that a State has the power "to safeguard the public service from disloyalty" and cited the Adler case as an instance of its upholding a loyalty oath.[3] What the Court in effect said in the Cramp case is that it will declare invalid ambiguous legislation containing penal provisions. It warned that it may impose even stricter standards against vagueness on any statute that in any manner impairs individual liberty. Its decision is evidence that it believes that constitutional standards apply equally to all phases of law and that it will test future loyalty oaths by all standards.

This review of the Cramp case brings up to date my article "Loyalty Oaths Before the Courts" (*School Life*, October 1961), a discussion of how loyalty oaths imposed on teachers have held up in the courts.

—AUGUST W. STEINHILBER,
Research assistant, School Administration Branch.

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[1] *Cramp* v. *Board of Public Instruction of Orange County, Fla.* 368 U.S. 278 (1961).

[2] *Lanzetta* v. *New Jersey*, 306 U.S. 451, 453.

[3] *Adler* v. *Board of Education of the City of New York*, 342 U.S. 485 (1952).

JOHN F. PUTNAM

Toward improved information about pupils

WHAT DO WE KNOW about the pupils in our schools? We know that about 30 percent of our population is pursuing some kind of educational program on a full- or part-time basis—about 50 million in our public and private elementary schools, secondary schools, and colleges and millions more in adult education programs. We have many other State and national totals showing, for instance, the number of pupils enrolled in each grade by age and sex; their average daily attendance; the number who graduate from high school; and the number transported to and from school at public expense. In each locality additional information is entered on the records of individual pupils such as the date of the pupil's birth, his address and telephone number, the names of his parents, and the marks he earns in his various studies.

But do we know enough? In evaluating our stock of information about pupils we must try to find the answers to two basic questions: First, who needs information and in what form? Second, how can we get what is needed?

Who needs information?

Those who work with pupils, those who administer programs, the public itself—all these need accurate information about individual pupils and groups of pupils. The classroom teacher needs information about individual pupils in order to counsel them, evaluate their performance, and report to their parents, as well as to teach them. The guidance counselor needs this information as a basis for helping the pupil with his personal and social problems and his educational and vocational plans. Attendance officers, school health officers and nurses, school psychologists, and social workers also rely on such information. Any educator with a valid reason for knowing about pupils with particular aptitudes, abilities, or handicaps needs it.

Dr. Putnam, specialist for educational records and reports in the School Administration Branch, is a former elementary school teacher and principal. He has also been a part-time instructor at Appalachian State Teachers College, the University of Virginia, and the University of Maryland. One of his principal duties since coming to the Office of Education in 1959 has been to coordinate the development of a pupil-accounting handbook.

School administrators need information about the individual pupil for making decisions, as, for example, in determining his bus assignment, his tuition and other charges, and his eligibility for activities and benefits; for permanent records of his status and performance; and as a basis for reporting.

Administrators also need information about groups of pupils. They need information about groups in order to evaluate all aspects of the school program. They need it to predict needs for staff, facilities, and supplies; to determine attendance areas; to predict needs for buses and plan bus routes; to assign teachers to schools, schedule teachers and pupils into classes, and to plan the curriculum. They need information on which to base accreditation reports and reports to patrons within the community and to State agencies.

The public, too, needs information about pupils. The taxpayers, the parents, the property owners, the businessmen—all these have a substantial investment in the education of their community's children; they should not be asked to invest blindly. And members of organizations interested in the schools, legislators at all levels of government, and other people who, by virtue of their positions represent the public, need information to guide them in their decisions affecting the schools.

Why is it needed in standard terms?

To a great extent the ability of teachers and administrators to do their jobs effectively depends on their access to accurate information about their pupils. In turn, the accuracy and usefulness of the information depends on the ability of teachers and administrators to use standard definitions and terms in reporting on their pupils.

Information based on standard definitions and reported in standard terms is combinable and comparable with similar information from many sources; information about pupils in one school district or State cannot be combined or compared with similar information from other districts or States unless all such information is based on standard definitions and presented in standard terms. When there is no agreement on terminology, States and even local districts within some States use different definitions for the same items, and if any attempt is made to combine or compare information from such sources, the

result must be qualified or footnoted to such an extent that it loses value. But when items of pupil information have the same meaning in every school district and are everywhere reported in the same terms, they will lend themselves to compilations which can be used profitably for many purposes; then, in short, information will be available in its most useful form.

When an item of information is carefully defined—and widely used as defined—it can be considered to be standardized. The universal or at least wide use of such standardized items, accurately recorded at their source, would result in these advantages:

Greater comparability of information about pupils within various communities and States.

Greater consistency in the kinds of information accompanying pupils who transfer from one school or school system to another.

More accuracy in the summaries of information compiled by local, State, and national offices.

A sounder basis for evaluating administrative, organizational, and teaching practices.

A greater quantity of significant information to guide local and State authorities in determining policy.

Easier and more reliable reporting to the public on the condition and progress of education.

More favorable conditions for research and use of research data.

What is more, reports based on standardized items will not only merit the full confidence of their users but will be more easily interpreted and more useful.

How is it to be obtained?

Besides the pupils themselves, no one has more at stake in the kind of information collected about them than the educators held responsible for their education. Clearly the development of standard information is a task that educators should undertake. And yet they cannot, working independently and in isolation, develop it alone. Before they can correctly record, interpret, and disseminate information about pupils, responsible school officials at all levels must develop a system of standard terminology. The general responsibility must be shared by local and intermediate administrative units within the States, by State departments of education, and the Office of Education.

Since local school districts are generally responsible for the actual collection of information about pupils, they should identify their needs with care and select the items of information necessary to meet these needs. These local needs include, of course, the items of information required by their States. Furthermore local districts should take steps to insure that they receive information promptly, that it is accurate and in useful form, and that it flows readily to the other offices and agencies that have use for it. The district should also provide the staff and funds necessary to carry out an effective program.

Each State department of education, because it is responsible for providing leadership and technical assistance to the local districts and for coordinating a statewide system of pupil information, should carefully analyze its existing program; review its forms, manuals, and regulations and, if necessary, revise them; and prepare any necessary new materials for local, regional, and statewide consideration.

Staff members of the State department have a responsibility for guiding and training local staffs in collecting, processing, interpreting, and disseminating information about pupils. For this training they will find conferences, written materials, and direct consultation useful. Before the department attempts to organize an improved system throughout the State, it might encourage one or two districts to set up pilot projects.

The first step in the improvement of a system of pupil information at both State and local levels is to place administrative responsibility in the hands of a single person. His work will be greatly facilitated if he has the active support of top administrators for the required changes in the information system and enough competent staff members to plan, supervise, and operate the system. Under his direction, the staff should—

1. Determine the objectives of the system in the light of the uses to which the information will be put.
2. Plan for the entire system carefully, including all procedures for collecting, processing, interpreting, and disseminating data. The plan should be put into writing.
3. Select items that meet informational needs and that suppliers are capable of furnishing. Items which will be combined from several sources should be stated in standard terms and should be codable for automatic data processing.
4. Develop forms for collecting information. These should be easy to understand, easy to fill in, easy to process. The number should be kept to a minimum by limiting the number of duplicating or overlapping requests and by designing forms so that they can be used for more than one purpose.
5. Gain the cooperation of all concerned; try to dispel any fears or reservations.
6. Ensure the accuracy of information at the source by impressing local employees with their responsibility for accurate information and instructing them in the techniques of accurately collecting and processing information.

7. Make the transfer from the old to the new system in a deliberate and careful manner.
8. After the new system has been installed, keep records up to date at all times.
9. Encourage all who have a stake in the system—suppliers, collectors, processors, and users of pupil information—to continuously evaluate its effectiveness and efficiency.

How will agreement be reached on terminology?

In order to derive the greatest benefit from systems of pupil information, educators must first reach agreement on terminology; that is, they must agree on what information should be collected and under what terms.

To enable educators to reach agreement, the Office of Education has assumed leadership in a cooperative project on pupil accounting for local and State school systems. In this project representatives of ten national organizations* are working with Office staff members in developing a handbook of terms and definitions related to pupils. The completed handbook will identify and define the items that should be collected and maintained on a comparable basis in local school districts across the country.

The project got under way officially in April 1960, when the executive secretaries of the cooperating organizations, speaking for their organizations, agreed to support it. At a later conference, representatives of these organizations—one from each organization—determined the general form and content of the handbook. Office of Education staff members, guided by the conference decisions and their own study of the forms and manuals used in the pupil information systems of the 50 States and in more than 200 local school systems, prepared the first draft.

After the first draft had been reviewed by a group of technical experts to determine its soundness, a corrected draft was reviewed and improved by a national conference of organization representatives. At a series of eight regional conferences attended by representatives of the participating organizations for each State, a refined draft was closely studied and tested to see that it met the wide variation in practice and needs across the country. Any differences in points of view will be resolved and the final form and content of the handbook determined in a second national conference.

All 50 States and the District of Columbia will be covered by 8 regional conferences this spring on the cooperative project on pupil accounting for local and State school systems:

Portland, Feb. 28 to March 2. **Alaska, California, Hawaii, Idaho, Montana, Oregon, Washington.**

Salt Lake City, March 7–9. **Arizona, Colorado, Nevada, New Mexico, Utah, Wyoming.**

Minneapolis, March 12–14. **Iowa, Minnesota, Nebraska, North Dakota, South Dakota, Wisconsin.**

Washington, March 21–23. **Delaware, District of Columbia, Maryland, New Jersey, North Carolina, Virginia, Pennsylvania.**

Atlanta, April 4–6. **Alabama, Florida, Georgia, Mississippi, South Carolina, Tennessee.**

Oklahoma City, April 9–11. **Arkansas, Kansas, Louisiana, Missouri, Oklahoma, Texas.**

Columbus, April 25–27. **Illinois, Indiana, Kentucky, Michigan, Ohio, West Virginia.**

Boston, April 30–May 2. **Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont.**

Through this procedure about 500 educators representing all geographic areas of the country and a diversity of educational responsibility, experience, training, and interest have participated. At each conference, decisions have been those of the majority of the representatives. The service of the Office of Education staff has been to coordinate the efforts of the representatives and to edit the handbook for consistency.

The voluntary participation of the cooperating organizations, with no expenses paid by the Federal Government, is highly significant, for only through voluntary action of school officials can the basic purposes of the handbook be achieved. No Federal or central agency in the United States can require school officials to use standard terminology and definitions even though use of them is indispensable to sound recordkeeping and reporting. Because the handbook represents the work of so many educators of diverse interest, it is about as close as possible to being universally usable or applicable.

Publication of the handbook, scheduled for the spring of 1963, will not by itself ensure standardization of terminology. Only when most or all of the States and local districts are using the handbook as a basis for pupil accounting systems will information that is truly comparable and combinable be available. When this point is reached, there will be marked improvement in the quality and usefulness of information about individual pupils and groups of pupils. The end result should be better education for pupils throughout the Nation.

* American Association of School Administrators, American Personnel and Guidance Association, Association for Supervision and Curriculum Development, Association of School Business Officials of the United States and Canada, Council of Chief State School Officers, Department of Classroom Teachers of the NEA, Department of Elementary School Principals of the NEA, National Association of Public School Adult Educators, National Association of Secondary School Principals, National School Boards Association.

JOHN A. GOUGH

Captioned films for the deaf

SIT before your television screen for 5 minutes with the picture on and the sound off. Five minutes is not a long period of time—not long compared with a lifetime of silence—but long enough to give you some idea of what the wordless picture world of the deaf is like.

A picture is worth a thousand words, goes the old saying, but the truth is that pictures without words are imperfect media of communication. You before your silent television screen can imagine how grateful you would be for captions were you never to have sound again. With this in mind, you can understand why the Office of Education receives such warm and enthusiastic letters from the deaf about the films it lends through the captioned-films-for-the-deaf program.

"Captioned films are a big help in opening another world to the deaf," writes Dewey Deer, president of the Washington State Association of the Deaf. A member of the Silent Recreation Club of Hollywood (Calif.) exclaims, "Everybody just loves your movies. Keep sending them!" To older deaf persons, who once, in the days of silent films, regarded the "movies" as a favorite form of relaxation and entertainment, seeing captioned films is like finding a long-lost friend. The Union League for the Deaf in New York City reports that an 80-year old man said, "It was the most!" after he saw the underwater picture "Silent World."

Captioning films for the deaf—that is, superimposing captions on motion pictures—began as a project about 10 years ago at the American School for the Deaf in West Hartford, Conn. As a struggling pioneer philanthropy, the West Hartford project could reach only a small audience, mostly students in State schools for the deaf. But encouragement from this group had much to do with Congress' passing a law in 1958 (Public Law 85–905) to set up a loan service of captioned films for the deaf. The purpose of the program is to help the deaf overcome their social and cultural isolation, much as the blind are helped by the books for the blind program (see *School Life*, September 1961).

P.L. 85–905 authorizes the Department of Health, Education, and Welfare (which has assigned the function to the Office of Education) to acquire films by purchase, lease, or gift and to provide for their captioning and distribution through State schools and other agencies for showing without charge to groups of eight or more deaf persons. For this purpose the Office may accept gifts, contributions, and voluntary and uncompensated service from individuals and organizations.

The Office program began with five Walt Disney films, the gift of the president of Captioned Films, Inc. It now has 150 prints of 50 films. Some of the 50 are adventure yarns (such as "Treasure Island"); some are comedies (such as "Fuller Brush Girl"); some are historical (such as "Abe Lincoln in Illinois"); and some are purely educational (such as "Beaver Valley"). Many films are booked 2 years ahead, and more than 600 groups have registered to receive them. In 1960 more than 90,000 deaf persons saw these films—in schools, churches, hospitals, homes for the aged, and speech centers.

Congress raised the appropriation for the program for fiscal year 1962 by $65,000 (bringing the appropriation to the full $250,000 authorized by the law). With this additional fund the Office has begun to caption purely educational films and has selected several science films. Teachers in schools for the deaf from New York to California are writing titles for these films.

Although teachers of the deaf see great possibilities in captioned films as a means of breaking the language barrier which severely limits the scholastic attainment of most deaf children, they know that the type of film which can help the deaf child to learn is not necessarily didactic. Reading, one of the basic language arts, is the very heart of the education of the deaf. Thus, viewing and reading a captioned film—whether it is a Laurel

John A. Gough, chief of the Captioned Films for the Deaf Section of the Office of Education, has taught the deaf in his native State of Indiana, in Georgia and Missouri and has been superintendent of the Oklahoma State School for the Deaf. His most recent post before coming to the Office of Education was that of chairman of the department of education at Gallaudet College in Washington, D.C. He has headed the captioned films program since its inception as a Government program.

and Hardy comedy or a serious documentary—becomes a learning experience for the deaf child.

Recently, Robert Baughman, principal of the vocational department of the Kentucky School for the Deaf, wrote to the Office to suggest captioning of a short film on hockey. The film had been shown at his school without captions following a full-length motion picture. Mr. Baughman pointed out that with captions the film "would have been an excellent lesson in Canadian geography and on the terms associated with hockey."

Those who know little about deafness have difficulty in appreciating the dual nature of the handicap which deafness imposes when it occurs in infancy or early childhood. The person with normal hearing can hardly understand the nature of a world without sound. He can close his eyes and imagine the world of the blind, but he cannot so easily cut off sound. To be sure, he may have experienced the difficulty of talking through a heavy glass door, been trapped in the maze of an amusement park, lost in a deep, silent woods, or wakeful in the quiet night, but he can never know the silence a deaf child knows, who has been deprived of all sound and, without its stimulation, been utterly bereft of language: this is the aspect of deafness that defies description and baffles the understanding of the normal person.

Baffling though the language problems of the deaf are to the normal person, they are not nearly so baffling as the deprivation itself is to the person who must live with it and overcome it. The little deaf child does not know his own name—does not know that he has a name. The world passing before him leaves great gaps in his understanding. He knows no names for even the commonest objects; he has no words to express his desires, feelings, hopes, urgent necessities. He faces one of the most insuperable of all educational barriers—that of learning language without any basic language on which to build and without the natural means of acquiring this basic tool, namely, hearing.

What, then, remains to pierce this barrier? The eye, plus, in some instances, a tiny remnant of hearing. But, as I have said, pictures at best are imperfect media of communication. You at your silent television set know this. Now you have some insight into why captioned motion pictures are so helpful in the education of the deaf. With captions films can provide the all-important verbalization the deaf person so desperately needs to apply to his experiences.

The extent to which captioned films will be used to teach the deaf remains largely a matter of speculation and future development. A bill before Congress (S. 2511) will, if it becomes law, authorize the development of new films, research on the problems of the deaf, and the training of teachers in the special techniques of teaching by film.

Students at Gallaudet College, the world's only college for the deaf, "hear" through the printed word the poetry of Cyrano de Bergerac during a trial run of a captioned film.

Meanwhile, members of more than 600 groups in 48 States (2 States are not participating) are undergoing new experiences that are often surprising and exciting. Whether considered as educational or merely entertaining, captioned films are a tremendous hit with the deaf of the United States; and the enthusiasm of the users is evidence that the Federal program authorized by Congress is attaining its purpose: "To provide through these films enriched educational and cultural experiences through which deaf persons can be brought into better touch with the realities of their environment" and "to provide a wholesome and rewarding experience which deaf persons may share together."

As the months pass, the captioned films Mr. Gough writes about are being seen by larger and larger numbers of deaf people. He has compared the record for the last 6 months of 1961 with the last 8 months of 1960 and has found a doubling in the audiences all along the line:

	1960	1961
School and youth groups	17,960	34,580
Religious groups (adults)	3,006	6,024
Clubs and other adult organizations	7,110	14,164
	28,076	54,768

For further information about the program write to Captioned Films for the Deaf, Office of Education, Washington 25, D.C.

SCHOOL BONDS—

Sales, Interest Rates, et cetera

A monthly report by ELMER C. DEERING, *Office of Education specialist on financing school facilities*

FOR THE FIRST TIME, school building authorities have outdistanced school districts in the sale of bonds for public school purposes. In September 1961, the latest month for which complete data on sales are available to the Office of Education, the authorities were at the top of the list of issuing agencies:

	Amount (In millions)	*Percent of total*	*Average net interest cost*
Authorities	63.8	43.7	3.65
School districts	51.8	35.5	3.62
Cities, towns, townships	17.3	11.9	3.28
Counties	13.1	8.9	3.36
All agencies	146.0	100.0	3.57

The explanation lay in large sales by two State authorities—$31.5 million in Georgia and $25.9 million in Pennsylvania, which together accounted for 90 percent of the bonds sold by authorities during the month.

THE AVERAGE NET INTEREST COST of rated school bonds sold in the past 14 months has remained fairly constant, at about 3.50 percent. As the table shows, however, there have been a few sharp fluctuations.

Most of the fluctuations have resulted from abnormal distributions of sales among the various ratings, though the effect of such imbalances can be either neutralized or accentuated by the size of the sales. In the school year 1960–61 the average distribution of sales among the ratings, and the average size of sale at each rating, were as follows (the average size of sale for all ratings was $1.65 million):

Aaa . . . . . 2.3 percent, $2.1 million
Aa . . . . . 27.6 percent, $3.4 million
A . . . . . 44.1 percent, $1.5 million
Baa . . . . . 23.2 percent, $1.2 million
Ba . . . . . 2.8 percent, $1.2 million

In months when sales closely followed the average pattern of distribution, fluctuations in the rates were slight both for each quality rating and for the average of all ratings. But there were three months when sales broke away from the pattern.

The first was in October 1960, when 31 percent of the sales were Baa bonds and only 6 percent were Aa. The increase in the one and the decrease in the other sent the average rate for all bonds upward. The effect was accentuated by the fact that 4 of the 27 sales of Baa bonds were large (averaging $3.9 million) and bore an average interest rate of 3.98 percent; these pushed the average rate for Baa bonds still higher, to 3.90 percent, which was one-tenth of one percentage point above the average for the other 23 sales of Baa bonds.

The second was in February 1961, when 38 percent of the sales were Aa and only 33 percent were A. These deviations combined to decrease the average rate for all bonds.

In August 1961 an abnormal distribution combined with an exceptionally large sale to produce an abnormal average rate for both Aa bonds and all bonds. The State of California sold $100 million of Aa bonds at a net rate of 3.75 percent—a sale which accounted for 77 percent of the 12 sales of Aa bonds. As a result of it, 56 percent of the sales were Aa. Without it, the average for Aa bonds would have been 3.33 percent and the average for all bonds would have been 3.48 percent; i.e., both would have been in line with recent interest rate trends.

In two other months, single large sales by themselves affected the average interest rates. In September 1960 a $25-million sale of Aa bonds at 3.59 percent raised the average for all Aa bonds from 3.40 percent to 3.56 percent,

Average net interest cost of Moody-rated bonds sold on the primary market for public school purposes, August 1960 to September 1961, by rating

Period	Aaa	Aa	A	Baa	Ba	All rated bonds
1959–60	3.26	3.63	3.77	4.21	4.55	3.84
1960–61	2.82	3.34	3.43	3.75	3.97	3.48
1960						
August	2.81	3.01	3.47	3.73	4.22	3.47
September	2.66	3.56	3.48	3.80	4.41	3.51
October	.....	3.26	3.54	3.90	.....	3.63
November	2.78	3.13	3.39	3.78	4.13	3.44
December	2.80	3.09	3.45	3.78	4.18	3.51
1961						
January	2.66	3.57	3.39	3.79	3.66	3.52
February	2.85	3.16	3.22	3.50	3.80	3.27
March	3.12	3.19	3.44	3.70	4.06	3.46
April	.....	3.20	3.38	3.73	4.28	3.43
May	2.92	3.22	3.31	3.70	4.02	3.37
June	3.01	3.19	3.44	3.65	4.15	3.47
July	2.97	3.25	3.38	3.73	4.21	3.41
August	2.93	3.65	3.47	3.81	4.25	3.59
September	3.08	3.25	3.52	3.75	.....	3.51

Source: The Investment Bankers Association, which reports with a Moody rating all sales by issuing agencies (school districts, States, counties, cities, towns, townships, and schoolbuilding holding companies) that had more than $600,000 worth of bonds outstanding at the time of sale—in other words, about 75–80 percent of all sales. Each month the figures are adjusted to include sales reported too late for inclusion in the month preceding.

though it had only a slight effect on the average for all sales. In January 1961, a $95-million sale of Aa bonds at 3.68 percent raised the Aa average from 3.40 to 3.57 percent and the average for all sales from 3.44 percent to 3.52 percent.

Any large sale at a rate much lower or higher than the average can materially affect the monthly average both for a certain rating and for all sales, though the effect varies, as I have already said, with the average size of sale and with the extent of the imbalance in the distribution among the ratings. By way of illustration, let us consider what effect an extra $25-million dollar sale would have had on the average interest rate for each rating in 1960–61 if the interest rate had been at three-tenths of 1 percentage point above the average for the rating: In an average month, such a sale, if made in Aaa bonds, would have raised the rate of those bonds from 2.82 to 3.08 percent. It would have raised Aa bonds from 3.34 to 3.45 percent, A bonds from 3.43 to 3.51 percent, Baa bonds from 3.75 percent to 3.87 percent, Ba bonds from 3.97 to 4.23 percent, and all rated bonds from 3.48 to 3.52 percent.

The effect of a large sale is greatly minimized when averages are reported on a quarterly basis. Over a period of three months, imbalances in the ratings of bonds and the size of sales tend to offset each other. An extremely large sale of $50 million or more can raise or lower the average quarterly rate abnormally unless there are sufficient other sales to neutralize it.

In 1960–61 school bond sales with Moody ratings averaged nearly 150 million per month. See the table for average interest rates, both for the year and by the month.

President Kennedy *from p. 5*

Today, more than at any other time in our history, we need to develop our intellectual powers to the fullest. But the facts of the matter are that many thousands of our young people are not educated to their maximum capacity—and they are not, therefore, making the maximum contribution of which they are capable to themselves, their families, their communities and the Nation. Their talents lie wasted—their lives are frequently pale and blighted—and their contribution to our economy and culture are lamentably below the levels of their potential skills, knowledge, and creative ability. Educational failures breed delinquency, despair, and dependence. They increase the costs of unemployment and public welfare. They cut our potential national economic output by billions. They deny the benefits of our society to large segments of our people. They undermine our capability as a Nation to discharge world obligations. All this we cannot afford—better schools we can afford.

To be sure, Americans are still the best-educated and best-trained people in the world. But our educational system has failed to keep pace with the problems and needs of our complex technological society. Too many are illiterate or untrained, and thus either unemployed or underemployed. Too many receive an education diminished in quality in thousands of districts which cannot or do not support modern and adequate facilities, well-paid and well-trained teachers, or even a sufficiently long school year.

Too many—an estimated 1 million a year—leave school before completing high school—the bare minimum for a fair start in modern-day life. Too many high school graduates with talent—numbering in the hundreds of thousands—fail to go on to college; and 40 percent of those who enter college drop out before graduation. And too few, finally, are going on to the graduate studies that modern society requires in increasing number. The total number of graduates receiving doctorate degrees has increased only about one-third in 10 years; in 1960 they numbered less than 10,000, including only 3,000 in mathematics, physical sciences and engineering.

An educational system which is inadequate today will be worse tomorrow, unless we act now to improve it. We must provide facilities for 14 million more elementary, secondary school, and college students by 1970, an increase of 30 percent. College enrollments alone will nearly double, requiring approximately twice as many facilities to serve nearly 7 million students by 1970. We must find the means of financing a 75-percent increase in the total cost of education—another $20 billion a year for expansion and improvement—particularly in facilities and instruction which must be of the highest quality if our Nation is to achieve its highest goals.

The control and operation of education in America must remain the responsibility of State and local governments and private institutions. This tradition assures our educational system of the freedom, the diversity and the vitality necessary to serve our free society fully. But the Congress has long recognized the responsibility of the Nation as a whole—that additional resources, meaningful encouragement and vigorous leadership must be added to the total effort by the Federal Government if we are to meet the task before us. For education in this country is the right, the necessity, and the responsibility of all. Its advancement is essential to national objectives and dependent on the greater financial resources available at the national level.

Let us put to rest the unfounded fears that "Federal money means Federal control." From the Northwest Ordinance of 1787, originally conceived by Thomas Jefferson, through the Morrill Act of 1862, establishing the still-important and still-independent land-grant college system, to the National Defense Education Act of 1958, the Congress has repeatedly recognized its responsibility to strengthen our educational system without weakening local responsibility. Since the end of the Korean War, Federal funds for constructing and operating schools in districts affected by Federal installations have gone directly to over 5,500 districts without any sign or complaint of interference or dictation from Washington. In the last decade, over $5 billion of Federal funds have been channeled to aid higher education without in any way undermining local administration.

While the coordination of existing Federal programs must be improved, we cannot meanwhile defer action on meeting our current pressing needs. Every year of further delay means a further loss of the opportunity for quality instruction to students who will never get the opportunity back. I therefore renew my urgent request of last year to the Congress for early action on those measures necessary to help this Nation achieve the twin goals of education: a new standard of educational excellence and the availability of such excellence to all who are willing and able to pursue it.

I. Assistance to elementary and secondary education.

Elementary and secondary schools are the foundation of our educational system. There is little value in our efforts to broaden and improve our higher education, or increase our supply of such skills as science and engineering, without a greater effort for excellence at this basic level of education. With our mobile population and demanding needs, this is not a matter of local or State action alone—this is a national concern.

Since my message on education last year, our crucial needs at this level have intensified and our deficiencies have grown more critical. We cannot afford to lose another year in mounting a national effort to eliminate the shortage of classrooms, to make teachers' salaries competitive, and to lift the quality of instruction.

CLASSROOMS. To meet current needs and accommodate increasing enrollments—increasing by nearly 1 million elementary and secondary pupils a year in the 1960's—and to provide every child with the opportunity to receive a full-day education in an adequate classroom, a total of 600,000 classrooms must be constructed during this decade. The States report an immediate shortage today of more than 127,000 classrooms and a rate of construction which, combined with heavily increasing enrollments, is not likely to fill their needs for 10 years. Already over half a million pupils are in curtailed or half-day sessions. Unless the present rate of construction is accelerated and Federal resources are made available to supplement State and local resources that are already strained in many areas, few families and communities in the Nation will be free from the ill effects of overcrowded or inadequate facilities in our public schools.

TEACHERS' SALARIES. Teachers' salaries, though improving, are still not high enough to attract and retain in this demanding profession all the capable teachers we need. We entrust to our teachers our most valuable possession—our children—for a very large share of their waking hours during the most formative years of their lives. We make certain that those to whom we entrust our financial assets are individuals of the highest competence and character—we dare not do less for the trustees of our children's minds.

Yet in no other sector of our national economy do we find such a glaring discrepancy between the importance of one's work to society and the financial reward society offers. Can any able and industrious student, unless unusually motivated, be expected to elect a career that pays more poorly than almost any other craft, trade, or profession? Unless this situation can be dramatically improved—unless the States and localities can be assisted and stimulated in bringing about salary levels which will make teaching competitive with other professions which require the same length of training and ability—we cannot hope to succeed in our efforts to improve the quality of our children's instruction and to meet the need for more teachers.

These are problems of national proportion. Last year I sent to the Congress a proposal to meet the urgent needs of the Nation's elementary and secondary schools. A bill (S. 1021) embodying this proposal passed the Senate last year; and similar legislation (H.R. 7300) was favorably reported to the House by its Committee on Education and Labor. It offered the minimum amount required by our needs and—in terms of across-the-board aid—the maximum scope permitted by our Constitution. It is imperative that such a proposal carrying out these objectives be enacted this session. *I again urge the Congress to enact legislation providing Federal aid for public elementary and secondary classroom construction and teachers' salaries.*

As noted earlier, Federal aid for construction and operation of many public schools has been provided since 1950 to those local school districts in which enrollments are affected by Federal installations. Such burdens

which may remain from the impact of Federal activities on local school districts will be eased by my proposal for assistance to *all* school districts for construction and teachers' salaries, thus permitting modification and continuation of this special assistance program as proposed in last year's bill.

A fundamental overhauling and modernization of our traditional vocational education programs is also urgently needed. Pursuant to my message on education last February, a panel of consultants to the Secretary of Health, Education, and Welfare is studying national needs in this area. They have been asked to develop recommendations by the close of this year for improving and redirecting the Federal Government's role in this program.

IMPROVEMENT OF EDUCATIONAL QUALITY. Strengthening financial support for education by general Federal aid will not, however, be sufficient. Specific measures directed at selected problems are also needed to improve the quality of education. And the key to educational quality is the teaching profession. About 1 out of every 5 of the nearly 1,600,000 teachers in our elementary and secondary schools fails to meet full certification standards for teaching or has not completed 4 years of college work. Our immediate concern should be to afford them every possible opportunity to improve their professional skills and their command of the subjects they teach.

In all of the principal areas of academic construction—English, mathematics, physical and biological sciences, foreign languages, history, geography and the social sciences—significant advances are being made, both in pushing back the frontiers of knowledge and in the methods of transmitting that knowledge. To keep our teachers up-to-date on such advances, special institutes are offered in some of these areas by many colleges and universities, financed in part by the National Science Foundation and the Office of Education. Many elementary and secondary school teachers would profit from a full year of full-time study in their subject-matter fields. Very few can afford to do so. Yet the benefits of such a year could be shared by outstanding teachers with others in their schools and school systems as well as with countless students. We should begin to make such opportunities available to the elementary and secondary school teachers of this country and thereby accord to this profession the support, prestige and recognition it deserves.

Another need is for higher standards of teacher education, course content, and instructional methods. The colleges and universities that train our teachers need financial help to examine and further strengthen their programs. Increased research and demonstration efforts must be directed toward improving the learning and teaching of subject matter and developing new and improved learning aids. Excellent but limited work in educational research and development has been undertaken by projects supported by the National Science Foundation, the Office of Education, and private groups. This must be increased—introducing and demonstrating to far more schools than at present up-to-date educational methods using the newest instructional materials and equipment, and providing the most effective in-service training and staff utilization.

Finally, in many urban as well as rural areas of the country, our school systems are confronted with unusually severe educational problems which require the development of new approaches—the problems of gifted children, deprived children, children with language problems, and children with problems that contribute to the high drop-out rate, to name but a few.

To help meet all of these needs for better educational quality and development and to provide a proper Federal role of assistance and leadership, I recommend that the Congress enact a program designed to help improve the excellence of American education by authorizing—

(1) *the award each year of up to 2,500 scholarships to outstanding elementary and secondary school teachers for a year of full-time study;*

(2) *the establishment of institutes at colleges and universities for elementary and secondary school teachers of those subjects in which improved instruction is needed;*

(3) *grants to institutions of higher education to pay part of the cost of special projects designed to strengthen teacher preparation programs through better curricula and teaching methods;*

(4) *amendment of the Cooperative Research Act to permit support of extensive, multi-purpose educational research, development, demonstration, and evaluation projects; and*

(5) *grants for local public school systems to conduct demonstration or experimental projects of limited duration to improve the quality of instruction or meet special educational problems in elementary and secondary schools.*

II. Assistance to higher education

In the last 10 days, both Houses of Congress have recognized the importance of higher education to the fulfillment of our national and international responsibilities. Increasing student enrollments in this decade will place a still greater burden on our institutions of higher education than that imposed on our elementary and secondary schools, where the cost of education per student is only a

fraction as much. Between 1960 and 1970 it is expected that college enrollments will double, and that our total annual operating expenditures for expanding and improving higher education must increase 2½ times or by nearly $10 billion.

In order to accommodate this increase in enrollments, the Office of Education estimates that nearly $22 billion of college facilities will have to be built during the 1960's—three times the construction achieved in the last 10 years. The extension of the college housing loan program—with a $1.5 billion loan authorization for 5 years, enacted as part of the Housing Act of 1961—assures Federal support for our colleges' urgent residential needs. I am hopeful that the Congress will this month complete its action on legislation to assist in the building of the even more important and urgently needed academic facilities.

But I want to take this opportunity to stress that buildings alone are not enough. In our democracy every young person should have an equal opportunity to obtain a higher education, regardless of his station in life or financial means. Yet more than 400,000 high school seniors who graduated in the upper half of their classes last June failed to enter college this fall. In this group were 200,000 who ranked in the upper 30 percent of their class, of whom one-third to one-half failed to go on to college principally because of a lack of finances. Others lack the necessary guidance, incentive, or opportunity to attend the college of their choice. But whatever the reason, each of these 400,000 students represents an irreplaceable loss to the Nation.

Student loans have been helpful to many. But they offer neither incentive nor assistance to those students who, by reason of family or other obligations, are unable or unwilling to go deeper into debt. The average cost of higher education today—up nearly 90 percent since 1950 and still rising—is in excess of $1,750 per year per student, or $7,000 for a 4-year course. Industrious students can earn a part of this—they or their families can borrow a part of it—but one-half of all American families had incomes below $5,600 in 1960—and they cannot be expected to borrow, for example, $4,000 for each talented son or daughter that deserves to go to college. Federal scholarships providing up to $1,000 a year can fill part of this gap. It is, moreover, only prudent economic and social policy for the public to share part of the costs of the long period of higher education for those whose development is essential to our national economic and social well-being. All of us share in the benefits—all should share in the costs.

I recommend that the full 5-year assistance to higher education proposal before the Congress, including scholarships for more than 200,000 talented and needy students and cost of education payments to their colleges, be enacted without delay.

III. Special education and training programs

MEDICAL AND DENTAL EDUCATION. The health needs of our Nation require a sharp expansion of medical and dental education in the United States. We do not have an adequate supply of physicians and dentists today—we are in fact importing many from abroad, where they are urgently needed—and the shortage is growing more acute as the demand for medical services mounts and our population grows. Even to maintain the present ratio of physicians and dentists to population we must graduate 50 percent more physicians and 90 percent more dentists per year by 1970, requiring not only the expansion of existing schools but the construction of at least 20 new medical schools and 20 new dental schools.

But here again more buildings are not enough. It is an unfortunate and disturbing fact that the high cost of the prolonged education necessary to enter these professions deprives many highly competent young people of an oportunity to serve in these capacities. Over 40 percent of all medical students now come from the 12 percent of our families with incomes of $10,000 or more a year, while only 14 percent of the students come from the 50 percent of the Nation's families with incomes under $5,000. This is unfair and unreasonable. A student's ability—not his parents' income—should determine whether he has the opportunity to enter medicine or dentistry.

I recommend that Congress enact the Health Professions Educational Assistance Act, which I proposed last year to (a) authorize a 10-year program of matching grants for the construction of new medical and dental schools and (b) provide 4-year scholarships and cost-of-education grants for one-fourth of the entering students in each medical and dental school in the United States.

SCIENTISTS AND ENGINEERS. Our economic, scientific, and military strength increasingly requires that we have sufficient numbers of scientists and engineers to cope with the fast-changing needs of our time—and the agency with general responsibility for increasing this supply today is the National Science Foundation. At the elementary and secondary school level, I have recommended in the 1963 Budget an expansion of the Science Foundation program *to develop new instructional materials and laboratory apparatus for use in a larger number of secondary schools and to include additional subjects and age groups; an expansion of the experimental summer program permitting gifted high school students to work with university re-*

search scientists; and an expansion in the number of National Science Foundation supported institutes offering special training in science and mathematics for high school teachers throughout the country. The budget increase requested for this latter program would permit approximately 36,000 high school teachers, representing about 30 percent of the secondary school teachers of science and mathematics in this country, to participate in the program.

At the higher education level, I am recommending similar budget increases for *institute programs for college teachers; improvement in the content of college science, mathematics, and engineering courses; funds for laboratory demonstration apparatus; student research programs; additional top-level graduate fellowships in science, mathematics, and engineering; and $61.5 million in grants to our colleges and universities for basic research facilities.*

REDUCTION OF ADULT ILLITERACY. Adult education must be pursued aggressively. Over 8 million American citizens aged 25 or above have attended school for less than 5 years, and more than a third of these completely lack the ability to read and write. The economic result of this lack of schooling is often chronic unemployment, dependency, or delinquency, with all the consequences this entails for these individuals, their families, their communities, and the Nation. The twin tragedies of illiteracy and dependency are often passed on from generation to generation.

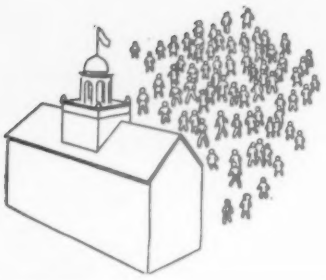
There is no need for this. Many nations—including our own—have shown that this problem can be attacked and virtually wiped out. Unfortunately, our State School systems—overburdened in recent years by the increasing demands of growing populations and the increasing handicaps of insufficient revenues—have been unable to give adequate attention to this problem. I recommend the authorization of a 5-year program of grants to institutions of higher learning and to the States, to be coordinated in the development of programs which will offer every adult who is willing and able the opportunity to become literate.

EDUCATION OF MIGRANT WORKERS. The neglected educational needs of America's 1 million migrant agricultural workers and their families constitute one of the gravest reproaches to our Nation. The interstate and seasonal movement of migrants imposes severe burdens on those school districts which have the responsibility for providing education to those who live there temporarily. *I recommend authorization of a 5-year Federal-State program to aid States and school districts in improving the educational opportunities of migrant workers and their children.*

EDUCATIONAL TELEVISION. The use of television for educational purposes—particularly for adult education—offers great potentialities. The Federal Government has sought to further this through the reservation of 270 television channels for education by the Federal Communications Commission and through the provision of research and advisory services by the Office of Education. Unfortunately, the rate of construction of new broadcasting facilities has been discouraging. Only 80 educational TV channels have been assigned in the last decade. It is apparent that further Federal stimulus and leadership are essential if the vast educational potential of this medium is to be realized. Last year an educational television bill passed the Senate, and a similar proposal was favorably reported to the House. *I urge the Congress to take prompt and final action to provide matching financial grants to the States to aid in the construction of State or other nonprofit educational television stations.*

AID TO HANDICAPPED CHILDREN. Another long-standing national concern has been the provision of specially trained teachers to meet the educational needs of children afflicted with physical and mental disabilities. The existing program providing Federal assistance to higher education institutions and to State education agencies for training teachers and supervisory personnel for mentally retarded children was supplemented last year to provide temporarily for training teachers of the deaf. *I recommend broadening the basic program to include assistance for the special training needed to help all our children afflicted with physical and mental handicaps.*

FEDERAL AID TO THE ARTS. Our Nation has a rich and diverse cultural heritage. We are justly proud of the vitality, the creativity, and the variety of the contemporary contributions our citizens can offer to the world of the arts. If we are to be among the leaders of the world in every sense of the word, this sector of our national life cannot be neglected or treated with indifference. Yet, almost alone among the governments of the world, our Government has displayed little interest in fostering cultural development. Just as the Federal Government has not undertaken and should not and will not undertake to control the subject matter taught in local schools, so its efforts should be confined to broad encouragement of the arts. While this area is too new for hasty action, the proper contributions that should and can be made to the advancement of the arts by the Federal Government—many of them outlined by the Secretary of Labor in his decisions settling the Metropolitan Opera labor dispute—deserve thorough and sympathetic consideration. A bill (H.R. 4172) already reported out to the House would make this possible and *I urge approval of such a measure establishing a Federal Advisory Council on the Arts to undertake these studies.*



Enrollment, teachers, and schoolhousing

HIGHLIGHTS FROM THE FALL 1961 SURVEY OF PUBLIC SCHOOLS

EVERY FALL, after school opens, State departments of education report to the Office of Education on selected basic items of information about the public elementary and secondary schools. What they reported in the fall of 1961 now appears in summary form in an Office of Education publication (Office of Education Circular No. 676, *Fall 1961 Statistics on Enrollment, Teachers, and Schoolhousing in Full-Time Public Elementary and Secondary Day Schools*, by Samuel Schloss and Carol Joy Hobson), from which the following figures are taken.

Pupil enrollments

37.5 million pupils were enrolled—24.7 million in elementary schools and 12.8 million in secondary schools. Altogether this was an increase of 1.2 million, or 3.4 percent, over the fall of 1960. Most of the increase was in the secondary schools.

Classroom teachers

1,463,000 full-time and part-time classroom teachers were employed: 871,000 in the elementary schools, 592,000 in the secondary. This was an overall gain of 55,000, or 3.9 percent, over the 1960 total.

Substandard credentials

89,700 teachers had substandard credentials—a decrease of 2,600, or 2.8 percent, from the fall of 1960. The percentage of *all* teachers with such credentials also was reduced, from 6.6 percent to 6.1 percent. Most of the teachers with substandard credentials were in elementary schools—64,500, compared to 25,200 in secondary. The elementary schools were credited with all the decrease; the secondary schools, in fact, had a small increase.

Classrooms completed

72,200 classrooms were completed in 1960–61. This figure, which includes both new construction and rooms converted from other uses, sets a new high: last year's total was 69,400; the previous record was set in 1957–58, when 72,100 classrooms were completed.

Classrooms scheduled for completion

62,700 classrooms are scheduled for completion in 1961–62—13.1 percent fewer than the number completed last year.

Classrooms abandoned

18,700 classrooms were abandoned during 1960–61, some because buildings had become obsolescent, some because the population had shifted, some because school districts had been consolidated. In the last 4 years the average number of classrooms abandoned has been 17,600 a year.

Pupils in excess of capacity

1,694,000 pupils were in excess of the normal capacity of the classrooms in use in the fall of 1961; the number had been reduced less than 200,000 from the year before. The pupils "in excess" were not the only ones handicapped by being crowded: pupils who shared the rooms with them were crowded too. In addition, an estimated 2 million were attending school in facilities considered unsatisfactory.

Classrooms shortage

127,200 additional classrooms were needed in the fall of 1961 as compared with 142,500 in the fall of 1960. Of the total classroom shortage, 60,200 were needed to relieve overcrowding, 67,000 to replace unsatisfactory facilities. About two-thirds of this year's reduction in the shortage was reported by 18 States for which the data are less comparable with last year's than in the other States.

Over the past 6 years the average annual number of classrooms completed has been 69,100. Since the additions have done little more than take care of increases in enrollment and replace abandoned classrooms, they have not been numerous enough to substantially reduce the backlog of need which accumulated in earlier years.

Enrollment, teachers, and schoolhousing in full-time public elementary and secondary day schools, by State, fall 1961

(Unless otherwise noted, "elementary" includes kindergarten and "secondary" includes junior high school)

State	Pupils enrolled		Total Classroom teachers		Teachers with substandard credentials		Pupils in excess of normal capacity of school plants in use		Additional classrooms needed	Classrooms scheduled for completion in 1961–62
	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary		
50 States & D.C.[1]	24,685,888	12,818,302	870,631	592,228	64,464	25,233	962,934	730,928	127,165	62,737
Ala.[3]	457,411	329,567	14,684	11,613	1,199	873	52,562	47,400	5,166	1,530
Alaska	38,030	8,899	1,442	595	42	18	4,881	649	361	126
Ariz.[3]	265,000	79,000	9,004	3,038	67	5	9,000	14,375	1,215	720
Ark.[2]	240,512	189,797	8,557	6,896	1,559	389	10,169	10,055	2,696	306
Calif.	2,410,000	1,150,000	76,750	47,500	8,000	3,500	37,120	5,966	3,000	10,000
Colo.	251,496	163,786	9,666	8,097	214	59	14,591	10,789	1,609	405
Conn.	349,867	149,125	12,374	8,157	1,100	600	13,382	5,340	941	801
Del.	49,750	37,158	1,999	1,876	400	90	1,774	1,008	167	86
D.C.	83,733	43,535	2,668	1,861	970	510	11,495	4,214	786	84
Fla.	598,349	432,004	21,737	17,987	296	15	38,486	39,317	4,703	2,002
Ga.[4]	652,151	305,617	21,032	12,070	428	164	35,603	27,249	3,464	884
Hawaii[2]	88,457	59,876	3,004	2,000	13	25	2,621	2,061	350	253
Idaho	90,892	72,986	3,422	3,471	1,053	583	5,281	4,014	708	135
Ill.	1,293,762	516,302	53,110	23,277	5,298	602	77,815	16,622	7,409	2,386
Ind.	659,463	350,827	23,999	12,764	2,250	450	6,188	3,812	1,262	1,620
Iowa	376,184	213,315	14,980	11,641	200	80	4,500	7,500	620	500
Kans.	357,385	117,486	13,525	8,560	.....	.....	21,000	18,200	2,513	468
Ky.	447,000	178,000	15,475	8,260	2,141	337	22,786	9,074	7,374	1,100
La.	560,000	165,875	16,115	11,003	1,020	480	10,000	5,500	1,875	1,170
Maine[3]	156,795	50,466	5,813	2,718	270	86	8,339	5,176	856	420
Md.	370,235	264,753	[5] 12,857	[5] 12,072	4,377	2,075	33,828	32,445	2,952	1,240
Mass.	557,499	354,341	21,004	17,104	410	488	16,720	19,506	2,382	1,462
Mich.	1,070,410	656,058	38,372	27,787	6,540	417	30,000	21,900	7,923	3,450
Minn.	413,748	295,146	15,157	14,224	425	102	15,904	12,459	2,126	992
Miss.	357,154	196,651	10,973	8,054	420	375	14,380	5,984	1,578	882
Mo[3]	634,197	204,526	21,035	9,859	49	87	174	37,830	3,601	1,643
Mont.	101,309	48,397	4,810	2,151	84	5	2,655	3,549	441	266
Nebr.	189,581	101,648	8,598	5,322	459	123	11,526	8,160	1,600	407
Nev.	45,512	24,605	1,825	1,155	.....	.....	2,013	2,913	278	256
N.H.	73,582	36,603	2,813	1,850	113	70	2,825	1,883	245	179
N.J.	738,068	364,644	27,895	20,879	5,010	1,595	42,980	36,384	3,902	2,228
N. Mex.[2]	134,526	94,252	5,028	4,094	14	5	6,358	6,855	846	325
N.Y.[2]	1,659,000	1,184,000	64,039	58,946	2,674	3,517	93,125	77,338	13,599	4,320
N.C.	843,886	281,948	28,045	10,968	1,148	206	42,398	19,865	4,026	1,616
N. Dak.	98,853	39,876	4,425	2,432	.....	.....	3,383	1,776	704	310
Ohio	1,323,114	684,003	45,318	29,960	3,880	1,290	34,136	13,809	3,096	3,581
Okla.	335,500	214,500	12,155	9,200	.....	.....	16,000	4,000	3,100	1,000
Oreg.	271,611	127,230	10,858	6,878	1,086	50	4,101	2,908	729	500
Pa.	1,142,641	855,706	39,415	38,246	547	853	33,455	43,300	6,883	1,969
R.I.[2]	78,783	57,610	2,887	2,696	154	195	2,074	2,667	297	62
S.C.	379,470	219,088	12,289	8,984	[6] 11	[6] 26	13,788	17,340	1,895	440
S. Dak.	103,842	49,235	5,239	2,720	869	303	6,097	3,120	653	287
Tenn.	585,000	260,000	19,520	10,073	860	215	17,520	10,967	1,918	1,000
Tex.[3]	1,715,153	504,658	51,960	33,571	3,795	3,105	50,687	24,946	4,395	3,868
Utah	146,244	100,648	4,910	4,109	186	77	12,154	6,228	928	541
Vt.	53,473	22,872	2,155	1,239	151	103	3,411	1,871	315	83
Va.	592,044	281,978	20,328	13,486	1,765	292	33,576	27,444	3,943	1,899
Wash.	403,183	257,047	14,950	10,850	900	200	11,771	21,943	2,285	1,015
W. Va.	260,947	175,843	9,348	6,898	856	285	6,147	13,653	1,761	329
Wis.[7]	532,444	213,805	20,738	11,208	800	200	11,399	9,314	1,507	1,411
Wyo.[2]	48,642	33,010	2,329	1,829	361	108	756	250	182	180
Am. Samoa	3,532	2,025	260	63	.....	5	.....	270	186	81
C.Z.	6,860	5,083	201	173	2	.....	384	.....	8	28
Guam	8,919	5,229	296	216	53	4	.....	.....	230	49
P.R.	389,138	192,066	8,415	5,744	1,143	2,692	127,632	32,750	4,752	509
V.I.[2]	5,011	2,338	132	109	.....	.....	1,868	478	107	40

[1] National totals, though shown to the last digit, are not in fact that precise; they are merely the sums of State figures, which included both rounded and unrounded figures. [2] Elementary school, K–6; secondary, grades 7–12. [3] Elementary school, K–8; secondary, grades 9–12. [4] Elementary school, K–7; secondary, 8–12. [5] Includes librarians and guidance workers. [6] For 1960–61 school year. [7] Excludes vocational schools not operated as part of the regular school system.

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